

# Radioactivity Neutralization Methods

# **Dr. Radha Roy's Transmutation Process**

Professor Radha R. Roy invented a process for cost-effectively transmuting radioactive nuclear isotopes to harmless, stable isotopes. Radioactive elements all have too many neutrons. Roy's process transmutes these unstable isotopes to stable ones by knocking out the extra neutrons by bombarding them with photons (produced as X-rays) in a high-powered electron linear accelerator.

A photon is a football-shaped packet of electromagnetic waves with a content of energy equal to Planck's constant times the frequency of the waves. Visible light comprises of photons with a range of frequencies with energy contents within which they can stimulate, but not over or under-stimulate, an eye's light receptors.

Photons of far higher frequencies have sufficient energy to alter nuclei.

# **Deep Underground Burial of Radioactive Waste**

The Department of Energy once chose deep underground burial of radioactive waste inside Nevada's Yucca Mountain with an estimated lifetime cost of \$150 billion as the best answer to the problem of permanent disposal of nuclear waste.

Military 'clients' of the Department of Energy oppose neutralization of nuclear waste in order to preserve their source of bomb-grade uranium and plutonium.

# **Remediating Nuclear Waste with Electron-Captured Protons Results in Significant Net Energy Gain**

Using high-density charge cluster accelerators, 10 to 20 times as much energy can be produced by remediating radioactivity emissions from stockpiles of nuclear waste products than originally consumed by the remediation process.

Laboratory tests have demonstrated that this new low-velocity method for remediating nuclear waste with electron-captured protons results in substantially more energy [in the form of photons as light and electrons as heat] than is required to power the treatment apparatus itself.

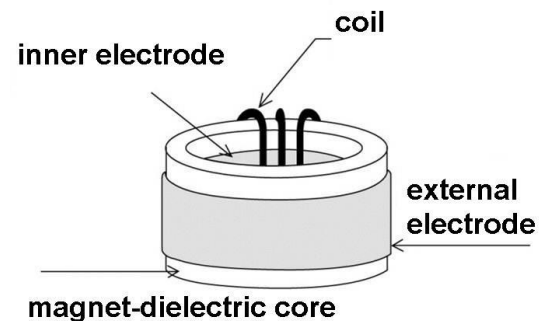
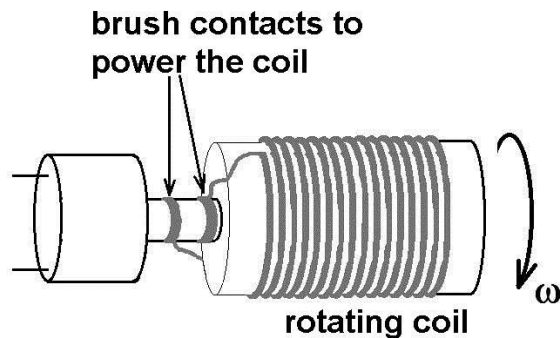
The technique produces electron clusters with energy densities equivalent to 25,000 degrees Celsius upon impact with a target material, while consuming only 20 microjoules to produce the effect. The electron clusters travel at no more than 10% light speed and have been shown to penetrate any substance with a high degree of precision. Using a deuterium-loaded palladium foil, bombardment areas demonstrate transmutation into silicon, calcium, magnesium and lithium.

# Methods of Influencing Radioactivity Decay

During 10 hours of cavitation process in a 5-kilowatt cavitator a 20% decrease of radioactivity was measured in the ionized liquid material ***and around the device also.***

Complete neutralization of radioactivity is expected with 100 hours of operation.

The theory is that controlled disturbance of aether density influences radioactivity decay.



# Hawkings' Generator of Cold Electricity

The Hawkings' generator results from feeding high voltages oscillating at optimally 150,000 hertz to two 4-inch fluorescent lights. Each fluorescent tube has a strong permanent magnet attached to its center – north pole on one side, and south pole on the other side. The magnetic field between the two poles deflects the electrons in the tube off to one side. The tube is now no longer capable of generating hot electricity. Instead only *cold* electricity is extracted from the zero point energy field by the tube.

The cold electricity emanates out the other end of the tubes which are each wired to a brass electrode. A 6 to 8-inch white spark of cold electricity 4 inches in diameter is produced between the two brass balls. An equivalent-sized spark generated by an arc welder would require thousands of amperes and volts.

Cold electricity is not measurable with ordinary voltmeters and ammeters since it strangely has no electrons. However, cold electricity can power lamps, etc. Totally different applications could result from the observation that materials inserted in a spark of cold electricity sometimes transmute to elements of higher density.

# **Piezonuclear Reactions in Solutions Cavitated by Ultrasound**

Ultrasonic cavitation of doubly distilled deionized water produces abnormal changes in the concentration of the elements. Ultrasonic cavitation of solutions of iron produces pulses of neutrons without gamma emissions above the background level. Ultrasonic cavitation of solutions of a radionuclide caused a decrease of the radioactivity obtained more quickly than is the case for the natural decay.

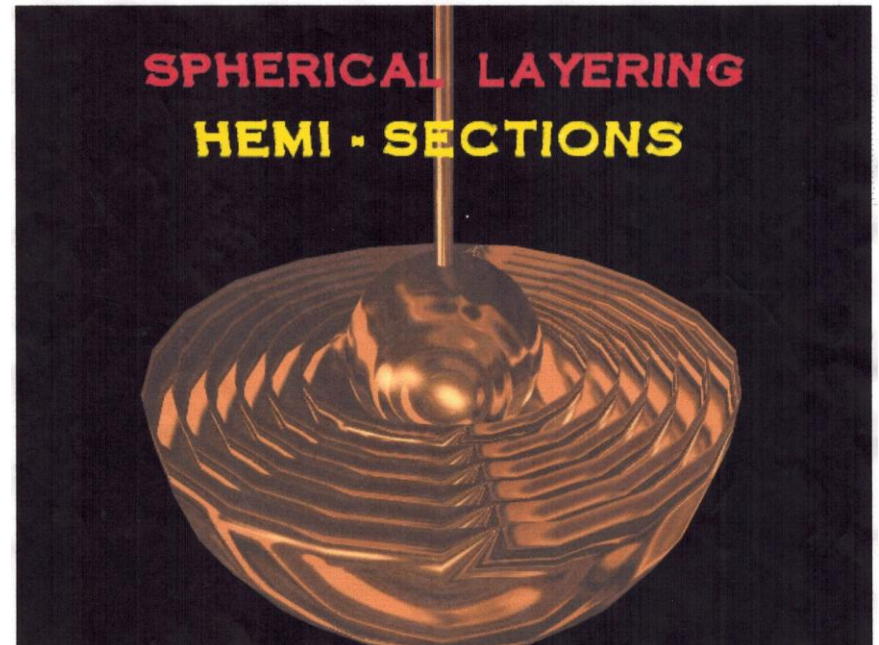
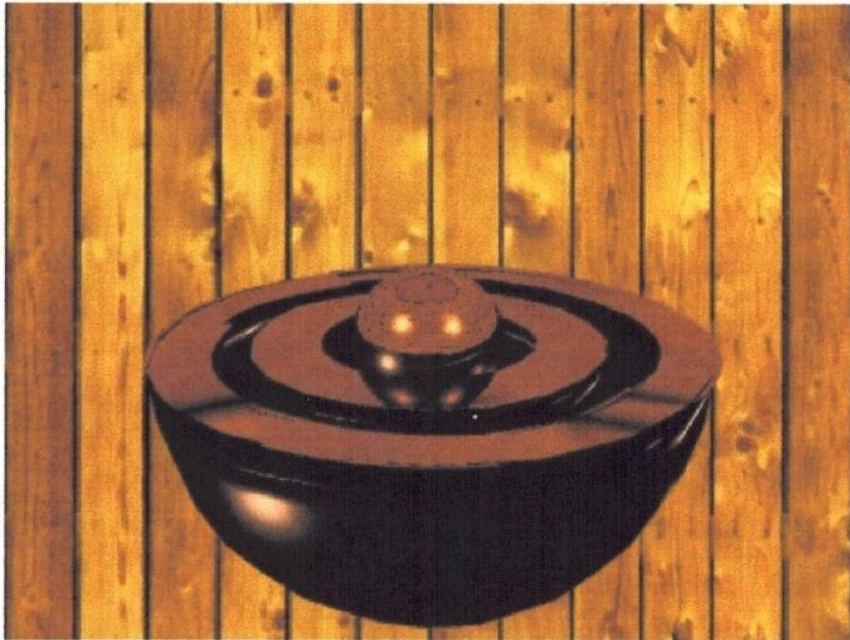
Pat. WO/2008041254 “Apparatus and process for the production of neutrons by means of ultrasounds and the cavitation of substances”

Pat. WO/2008041255 “Process and plant for the production of endothermic and exothermic piezonuclear reactions by means of ultrasounds and the cavitation of substances”

Pat. WO/2008041253 “Apparatus and process for the quenching of the radioactivity of radioactive materials by means of piezonuclear reactions induced by ultrasounds and cavitation”

# Dematerialization Devices A, B, C and D Using Highest Powered Positive Ions Ever

A dematerialization device is constructed of copper only. Four types of dematerializers make it possible to transmute any radioactive waste into its lowest possible harmless form by passing it through a dematerialization spherical boundary – an extremely active boson field kinetics area of plasmatic surface tension/ extreme heat. The dematerializers have the ability to heat the waste hotter than the sun – to the point where anything is converted into its lowest form. Nuclear waste, primarily strontiums, will annihilate themselves since their almost unnaturally huge dent in space/time dissolves to near a low format environment.





# **Combining Brown's Gas with Bucking Magnetic Fields Inside a Plasma Ball**

Two coils are wound on a shaft in opposite directions. Currents are run through the coils which are then rotated in opposite directions. Bucking magnetic fields are then created and shaped into toroids.

The double toroids contain a plasma ball in the middle of the magnetic lines of force.

Spent nuclear fuel pellets are dropped into the magnetic bottle. The fuel pellets are then destroyed by a combination of the implosion machine, Brown's gas, and the Keller catalytic process.

# **Flame-Free Incineration of Radioactive Waste in a Catalyzer**

Scientists at Russia's Institute of Catalysis, led by Professor Zemfir, have developed a device that neutralizes radioactive waste through flame-free incineration in a catalyzer.

Capable of incinerating 50 metric tons of waste annually, the device was installed at the Novosibirsk Chemical Concentrate Plant. According to A. Kostin, the factory's deputy technical director, "The device is based on a catalytic converter that provides low temperatures for the oxidation process," – thus reducing the amount of nitrous oxides produced.

Experiments have confirmed the method's efficiency and environmental safety.

# **Barker's Patented Radioactivity Remediation Method**

When a negative potential is applied to alpha-emitting radioactive material, enhanced alpha decay of the radioactive material results. The energy of the alpha decay particles is captured and converted to thermal energy.

The rate of decay of the radioactivity of radioactive materials is greatly accelerated, and the materials are thereby decontaminated at a rate much faster than normal. The radioactive materials are placed within the sphere or terminal of a Van de Graaff electrostatic generator and allowed to be subjected to the electrical potential of the generator, such as in the range of 50 kilovolts to 500 kilovolts, for at least a period of 30 minutes or more.

Barker's method may be the easiest, most effective and least messy method for remediation. It is dry and reproducible. One shot of only minor energy is required, and then the process self runs. The equipment is simple, off the shelf and inexpensive, and requires no special skill, nor it is 'twitchy'.

US Patent 4,961,880 "Electrostatic Voltage Excitation Process and Apparatus"  
US Pat. 5,076,971 "Method for Enhancing Alpha Decay in Radioactive Materials"

# **DOE in 1992 Witnessed 96% Reduction of Radioactivity of Cobalt-60 with Brown's Gas**

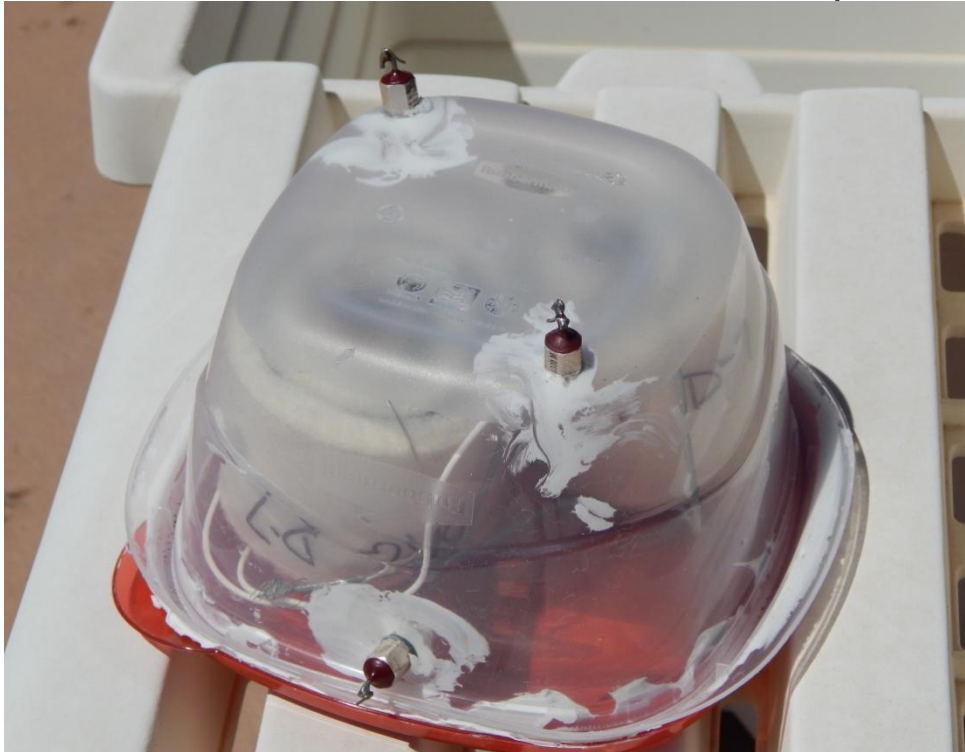
Professor Yull Brown invented the unusual gaseous fuel known as 'Brown's gas'. This gas – on its face a stoichiometric mixture of monatomic hydrogen and oxygen obtained by electrolysis of water – can denature radioactive elements.

An experiment involved the treatment with Brown's gas of a sample of the radioactive isotope cobalt-60. A Geiger counter's reading dropped from 1000 counts per minute to 40 counts per minute – a reduction in radioactivity of 96% that was witnessed by some Department of Energy officials. Their clumsy explanation of their denial that the reduction of radioactivity was due to Brown's gas was found to be ludicrous.

The radiation is neutralized by the molecules reforming into another material that is 'balanced'. Materials are radioactive when their electron shell has been stripped and is not balanced with the inner protons and neutrons. The inner mass radiates particles trying to become balanced again. Brown's gas just allows the protons, neutrons and electrons to come apart and back together again in a balanced (non-radioactive) form – forming a glasslike material.

# **'Hutchison Effect' for Neutralizing Both Radioactive Waste and Dispersed Radioactivity**

With a specially designed Hutchison-Lazaryan electronic frequency generator (shown in photos) John Hutchison claims by utilizing the 'Hutchison effect' he can neutralize radioactive waste and also excess radioactivity dispersed over an area of several square miles and maybe up to within a radius of 75 miles. A youtube video shows Hutchison's demonstration of transmutation of an alpha emitter with his 'raygun'.



# ZIPF Fusion

The ZIPF fusion process induces a wide variety of fusion reactions, resulting from the radial compression of individual diatomic and other simple molecules dissolved or suspended in a light water, carbon arc electrolysis cell. A variety of other cell configurations are envisioned.

The process appears to produce only stable isotopes, which should therefore make it capable of stabilizing a wide variety of radioactive waste materials. The theory on the process draws from condensed charge phenomena, Brown's gas implosion, cavitation bubble collapse and sonoluminescence – all variations of the Casimir effect – which is believed to cohere the zero-point energy of quantum vacuum fluctuations.

Transmutations using variations of this basic process may be applicable to a wide variety of nuclear wastes and appears capable of operating with an efficiency exceeding 100%.

A major implication of this process is that the strong force of the nucleus is understood as an ultra close range Casimir effect. The process is very simple and inexpensive to develop.

# **RIPPLE Fission**

The RIPPLE fission process utilizes a supersonic ionized gas to aerosol a counter flow heat exchanger that envelopes the radioactive waste aerosol in a vacuum induced plasma vortex which appears to disrupt the matter stabilizing influence of the quantum vacuum fluctuations resulting in 'gentle' low recoil fission reactions which produce only stable fission products, with excess neutrons being prompt converted to protons via quenched beta emissions.

The process is believed applicable to the entire spectrum of radioactive waste without the need for waste partitioning. This process is also conjectured to operate with an over-unity efficiency.

# **Nuclear Fusion-Fission Hybrid Could Contribute to Carbon-Free Energy Future**

Radioactive waste would be destroyed using a fusion-fission hybrid reactor – the centerpiece of which is a high-power Compact Fusion Neutron Source (CFNS) made possible by the invention of the Super X Divertor. The Super X Divertor is designed to handle the enormous heat and particle fluxes peculiar to compact devices; it would enable the CFNS to safely produce large amounts of neutrons without destroying the system.

The CFNS is based on a tokamak, which is a machine with a ‘magnetic bottle’ which confines high temperature (more than 100 million degrees Celsius) fusion plasmas for sufficiently long times.

The CFNS would provide abundant neutrons through fusion to a surrounding fission blanket that uses transuranic waste as nuclear fuel. The fusion-produced neutrons augment the fission reaction, imparting efficiency and stability to the waste incineration process.



# **AmoTerra Process**

The AmoTerra process utilizes confined explosions involving proprietary mixtures of materials that include radioactive waste. Ignition of such mixtures causes nuclear transmutations resulting in reduced radioactivity (to near-background levels) following combustion, gradually over 1 to 4 days.

This technique has been confirmed by Italy's National Agency for Atomic Energy and is supported by French Alternative Energies and Atomic Energy Commission scientists as a serious candidate for treatment of nuclear waste stockpiles.

# References:

Two files, 237 pages of “Radioactivity Neutralization Methods” and 104 pages of “Radioactivity Neutralization with Paul Brown’s Gamma Ray Method”, are available for free downloading at [padrak.com/vesperman](http://padrak.com/vesperman) and [commutefaster.com/vesperman.html](http://commutefaster.com/vesperman.html).