

HOW ROSSI COLD FUSION TESTS MISLED THE WORLD'S SCIENTISTS

INADVERTENT MISWIRING OF LEADS IS THE CAUSE

All around the world, thousands of people have been heralding the introduction of the Rossi E-CAT energy catalyzer device which claims to generate more energy output than is input due to low energy nuclear reaction.

What makes this claim different is that at least fifteen scientists from around the world, including from NASA, have lent some support for it, after witnessing a demonstration or analyzing the results. They generally concluded that the output power was apparently much larger than the input, and only nuclear reactions could account for the difference.

However, Dick Smith, patron of Australian Skeptics, says, "It would be great if it's true, but it's more likely just a misconnection of the power lead."

Smith was approached in December to invest \$200,000 in this scheme to provide almost free energy and thus save the planet from climate change. He sent aerospace engineer Ian Bryce of Australian Skeptics to an investors' meeting on the NSW North Coast on January 13 to investigate.

Smith says, "If one of the wires in the three-core power lead was accidentally misconnected, the actual measurements of current witnessed by two Swedish scientists would not be the total power going into the reactor, and there would be an apparent power gain. One of the scientists who observed an earlier test has now agreed this could be so."

Bryce found that in all six published tests up to July, a misconnected earth lead could funnel in up to 3 kilowatts, thus bypassing the power meters used, and accounting for all the measured output power in the form of steam. In all later tests, there was no valid power measurement due to poorly placed thermometers.

Smith says, "It is now up to Mr Rossi to recreate the March 2011 demonstration - surely it would only take a couple of hours - and to have an independent person actually measure the current in each of the wires in the three-wire power cord."

"There is little doubt that this will show that it was a misconnection of the wires that resulted in the seemingly unbelievable power gain which Mr Rossi attributes to cold fusion," Smith says. "Hopefully this finding will prevent millions of dollars being wasted by Mr Rossi."

"Until the chance of this accidental misconnection (an easy thing to happen) is

ruled out by a further test, I strongly recommend that the public do not purchase this machine or invest in this technology”.

*Explanation: a normal power cord has three wires – active (brown), neutral (blue) and earth (green and yellow). The measurements showing the current into the Rossi machine have been done on the brown lead which is normally active. However, if the green lead had been connected to the active, either in the three-pin plug or behind the wall outlet, and the green lead also became connected to some inputs to the reactor in the jumble of wires in the blue box, there would be extra power flowing which was not measured. Alternatively, other misconnections involving the earth and neutral wire are possible.

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BACKGROUND ON TECHNOLOGY AND INVESTIGATION

During 2011, Mr Andrea Rossi of Bologna, Italy, stunned many in the scientific community with his demonstrations of a device called E-CAT (Energy Catalyzer). He claims this device, through cold fusion, produces almost free and unlimited energy. This was hailed as the solution to our energy needs and global warming problems while calling for rapid investments. <http://ecatnews.com/>

In December, entrepreneur Dick Smith was asked to invest A\$200,000 in the licence to bring the cold fusion technology to Australia. He asked Australian Skeptics to investigate the technology. An investigator for the Skeptics, [Ian Bryce](#) examined all the observers’ reports and measured data, and performed his own analysis.

Bryce, an aerospace engineer, now believes he has found how scientists from around the world were misled by a switched connection in the power plug.

Bryce has investigated many energy-based schemes from around the world, and exposed the Lutec free energy generator in 2001. What makes Rossi’s claim different is that at least [fifteen scientists](#) from around the world, including from NASA, have lent some support for it, after witnessing a demonstration or analysing the results. They generally concluded that the output power was apparently much larger than the input, and only nuclear reactions could account for the difference.

Low Energy Nuclear Reactions (LENR), which were once thought to be based on ‘cold fusion’, have been an active research field for some scientists on the fringe for 23 years. However, there has never been a successful demonstration.

Bryce noted that in Rossi's experiments, if the earth wire was accidentally connected to the active pin of the power plug instead of the earth pin, and also to some of the power circuits inside the blue control box, then it could introduce extra power bypassing the metering instruments. One of the Swedish nuclear physicists who [witnessed a test](#) on 29 March agrees that it could be so. (Other misconnections would achieve the same result.) (For two connection diagrams see [here](#) and [here](#).)

Bryce firstly examined all six published tests of Rossi's E-CAT from December 2010 to July 2011, which includes models known as the 10 KW, the 3 KW, and the 3 KW truncated. Such a misconnection could apparently funnel in up to 3000 watts, rather than the 300 – 800 watts shown on the meters. Since the output power estimated in these 6 experiments ranges from 2300 to 2900 watts (after careful corrections and some estimation), all the excess power previously attributed to cold fusion is accounted for.

In all the tests after July of E-CATs known as the 27KW and the Megawatt models, there was no valid output power measurement due to poorly placed thermometers, and hence no proven extra power. Thus, Bryce believes all results of E-CAT tests are accounted for without involving LENR. (For a table of all relevant tests see [here](#)).

Bryce said photos show a current meter on the brown wire, while the unmeasured green wire lies beside it in plain view. (See [photo](#))

Scientists regard a green wire as a safety earth, and would not expect it to be used to carry power. Under such a misconnection, there is the risk that metal parts could become live, and pose a hazard to people nearby.

If Rossi disagrees, he can arrange for an independent test. It would be very straightforward to repeat the test with metering in all three wires. This would show whether the millions of dollars Rossi is seeking are justified or would be better spent elsewhere.

Another clue is that by simulating the 29 March results, Mr Bryce estimated the power being produced by the E-CAT for all the 6 hour test (while the input electrical power was recorded as only 300 W). The power graphs ([here](#) and [here](#)) show many features, such as going to zero for 20 seconds and then resuming at a higher level, that are more suggestive of switching actions than a real nuclear reaction.

And in the 27 KW E-CAT tests, Rossi started the claimed nuclear reaction two hours before the reactor chamber was fully filled with cooling water. This is irresponsible even for a car engine. For nuclear reactors, recall what a lack of cooling water did at Three Mile Island, Chernobyl and Fukushima!

Some scientists have remained rightly skeptical, such as Professor Peter Ekstrom of Lund University in Sweden. He says that nickel, hydrogen and copper are everyday materials that cannot be involved in a nuclear reaction. Others have pointed out that all other possible sources of energy need to be systematically ruled out before invoking something without a theoretical basis such as cold fusion. (See a translation of Ekstrom's paper [here](#))

In addition, there is a [dispute](#) over industrial property between Rossi and Greek company Defkalion, which suggests a mundane [technology](#) such as earth wires rather than an advanced nuclear process.

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