

HOW ROSSI COLD FUSION TESTS MISLED THE WORLD'S SCIENTISTS

INADVERTENT MISWIRING OF LEADS IS THE CAUSE

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, Australian 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 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.

NOTE:

*Full scientific backup is provided in the links and by contacting the author:
Ian Bryce, chief investigator, Australian Skeptics
+61 (0)408 177 007; ianrbryce@gmail.com*