

CHESHIRE INNOVATION®

Engineering Consultancy
 17 Vale Road, Timperley, Altrincham, Cheshire, WA15 7TQ, UK
 Tel/Fax +44 161 980 5191,
 E-mail bill.courtney@cheshire-innovation.com
 Web site www.cheshire-innovation.com

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Dear Dr Parry, UKRIO Trustees and Subscribers,

Prior to the 2016 conference I wrote to subscribers and Trustees alerting them to the role of the UKRIO in hiding research fraud.

In response, Dr Parry has written back to me. He claims that the UKRIO runs a volunteer service and that it is not accountable for the integrity standards of its volunteers.

This is unsatisfactory. We should not be setting up of investigative panels where the external panel members add credibility, but are mavericks, accountable to nobody.

My attempts to open the eyes of the UKRIO to this problem have come to nothing.

I conclude that the UKRIO is in need of deep reform. I will now place my evidence before you.

CONTENTS

1	The research fraud at Manchester University
2	The UKRIO becomes involved
3	Implications for pedestrians
4	The related financial fraud
5	Parallel developments at Cardiff University
6	My first attempt to get the UKRIO to confront its complicity in formal enquiry fraud
7	The EPSRC casts doubt on the formal enquiry findings
8	A proposal for the UKRIO
9	Recommendations
	Conclusion
	APPENDIX 1
	APPENDIX 2

1 The research fraud at Manchester University

From 1996 to 2004 I worked under the supervision of Dr O. Oyadiji, an academic engineer at Manchester University. My work was concerned with the development of a crash energy absorbing mechanism that I had discovered ten years earlier, while working as a physics teacher. This mechanism became known as **Shock Absorbing Liquid (SALi) Technology**. The human story behind my quest to develop SALi for the benefit of humanity can be found at http://www.cheshire-innovation.com/sali/CrashSALi-Project_files/British%20Reward.htm

When correctly packaged, SALi acts like a liquid version of expanded polystyrene foam.

In fact, that is what the earliest version of SALi was: a mixture of expanded polystyrene beads and Vaseline.



Figure 1. An early sample of SALi. (1986)

A stout, **low stretch** but flexible outer package needs to be added for SALi to become an effective impact energy absorbing cushion.

If elastic packaging is used, the SALi is completely ineffective. This is an important point to note because, as I will explain later, the Manchester researchers wilfully used elastic packaging to create poor results.

Shortly before starting my research at Manchester University, I exhibited SALi at an International Inventions Fair. It won an award and considerable media coverage followed.

By the time I started at the University I had become a minor local celebrity. On the whole, this served me well, with the technicians and students being warm and helpful to me. Some were keen to get involved and many helpful suggestions were made.

But my research supervisor Dr Oyadiji was the exception. He was upset by my pending fame and fortune, especially when I became known as “A millionaire in the making.”

During the next eight years he placed many obstacles in my path. These prevented me gaining a PhD and resulted in the loss of many commercial collaboration opportunities. My evidence is published at http://www.cheshire-innovation.com/sali/what_is_sali.htm

The liquid nature of SALi meant that it had novel impact energy absorbing properties. For example, in my private, pre-Manchester University research, I discovered that if it was used as a filling for car bumpers, it would have “smart” properties. This meant that it was soft for human leg impacts but stiff for impacts with more massive objects such as other vehicles. [Thankfully, I never hit a pedestrian, but the superior cushioning was very helpful when parking in tight spaces.]

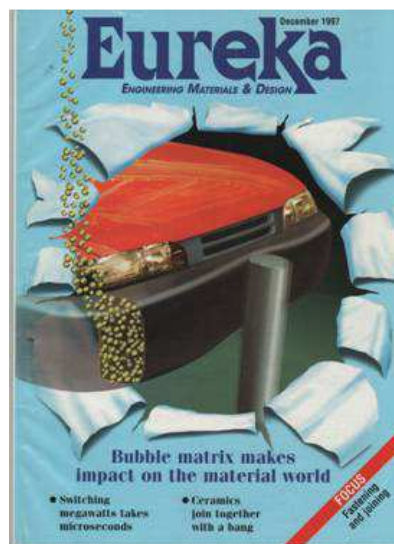


Figure 2. In December 1997 my smart bumper invention was the cover story in a popular engineering magazine distributed to university engineering departments.

At about this time the EU Commission published a draft directive requiring all new cars sold in EU countries from 2005 onwards to be fitted with soft pedestrian friendly bumpers. But the car makers objected because their customers wanted stiff bumpers to protect their vehicles in minor crashes. This disagreement became known as “the conflict of stiffness problem”.

I found myself in the happy position of being able to offer a smart bumper design that appealed both parties.

When the Automotive Division of Dow Chemicals read about my smart bumper design in Auto Express, they flew a senior executive over from Detroit to meet myself and Dr Oyadiji. This resulted in the **PedSALi** collaboration between me, Dow and Manchester University. The University received £212,000 EPSRC funding for its contribution to the work. The funding providers appointed me (trading as Cheshire Innovation) as the lead partner.

Sadly, this further boost to my status aggravated Dr Oyadiji’s unease, ending up with him sabotaging the project. The bizarre details of how he did this can be found on my PedSALi webpage, www.cheshire-innovation.com/sali/pedsali.htm

As you can read on this page, the most audacious aspect of the sabotage was that Dr Oyadiji ended up travelling to America, to present false research that “proved” that the PedSALi bumper was ineffective.

One of the tricks used to “prove” that SALi was ineffective is discussed at http://www.cheshire-innovation.com/sali/CrashSALi-Project_files/Exhibit%2037%20Bad%20packaging.htm

As you can see on this webpage, Dr John Turner, one of Dr Oyadiji’s closest colleagues created a fictional role of “PedSALi project coordinator” for himself that displaced me from my appointed role as lead partner. In this fictional role he wrote to the funding providers claiming *quite falsely* that the low stretch packaging, essential for SALi to work was unacceptable to the car bumper maker, Dow Chemicals.

Oyadiji, Turner et al., then carried out invalid simulated human leg impact experiments using elastic packaging. As I had warned my Manchester colleagues, the simulated bumper displayed very poor energy absorbing characteristics.

In spite of written protest from me, they made two trips to America, to present their fraudulent results at engineering research conferences.

Finally, in their end of project report for the EPSRC, they quite falsely claimed that Dow had examined these experimental results and concluded that the SALi bumper was ineffective.



Figure 3. Dow estimated that royalties from car bumpers manufactured according to my design would earn about £30 million by 2015. This prospect made Dr Oyadiji very unhappy.

3.3 Unless otherwise agreed for specific projects MIL shall negotiate exploitation arrangements with third parties relating to the IPR on behalf of the Company. MIL on behalf of the University shall pay to the Company fifty per centum (50%) of any and all revenues received by MIL from third parties arising from any such exploitation of IPR or University IPR or any combination thereof. For the avoidance of doubt such percentage shall be calculated prior to MIL deducting its expenses incurred as part of such exploitation.

Figure 4. My main motivation for inventing is humanitarian. So I voluntarily signed a 50:50 royalty sharing agreement with MIL, the business arm of Manchester University. My plan was that the University share of the royalties would be used to fund a SALi research hub developing a range of life saving applications for SALi. I planned to use the other 50% of the royalties developing my other humanitarian inventions. For example, my clean energy power generator described at www.cheshire-innovation.com/Sky%20Tube.htm

In reality, the PedSALi project was sabotaged and no royalties were earned. In fact, signing the agreement did more harm than good, because my royalty sharing agreement won plaudits within MIL and Dr Oyadiji was irritated. He became so agitated that Dr Michelle Cooper, a business manager at MIL, banned him from business meetings.

The collapse of the PedSALi project was a disaster for European pedestrians, because with no other solution to the conflict of stiffness problem, the EU soft bumper directive was postponed.

2 The UKRIO becomes involved

After five years of lobbying, Manchester University finally agreed to hold an enquiry into my allegations of SALi research fraud. The screening process passed smoothly, but immediately the formal enquiry stage was reached, problems started to emerge. You can discover what these problems were on my PedSALi webpage www.cheshire-innovation.com/sali/pedsali.htm.

The formal enquiry panel had three members, including Dr Pablo Fernandez, a member of the UKRIO Advisory Board.

Here are four examples of how the formal enquiry stage of the investigation was fixed.

- 1 Dr Oyadiji was selected as a scapegoat for investigation and Dr Turner who had created the false role for himself as "PedSALi project coordinator" was allowed to testify on Dr Oyadiji's behalf. So, instead of being investigated, he appeared as an "independent witness."
- 2 Dr Michelle Cooper the business manager at MIL, who had to ban Dr Oyadiji from her business meetings, was not called as a witness.
- 3 My royalty sharing agreement that had the potential to bring £15 million into the University by 2015 is not referred to in the report.
- 4 Small scale, but high quality research into the SALi bumper design was carried out at Cardiff University. A Cardiff University research paper on SALi filled bumpers was submitted to the enquiry panel, but is not referred to in their report.

The formal enquiry report cleared Dr Oyadiji of any wrongdoing while blaming me for the failure of PedSALi and other projects.

You can see an example of how the panel created false evidence to suggest that I was professionally incompetent by reading Appendix 1 below.

This formal enquiry fraud should be a matter of concern for UKRIO subscribers because the UKRIO representative, Dr Pablo Fernandez, is a member of the UKRIO Advisory Board.

3 Implications for pedestrians

It cannot be proved beyond all possible doubt that the PedSALi bumper would have been acceptable to the European car makers because the PedSALi research was never done correctly. However as you can see from the test results presented on the PedSALi webpage and independent work at Cardiff University, the valid research results were very encouraging.

According to the World Health Organisation **270 000** pedestrians are killed on the world's roads each year. Many more pedestrians survive, but suffer painful life changing injuries.
(http://www.who.int/mediacentre/news/notes/2013/make_walking_safe_20130502/en/)

When mortality rates on this scale are involved, fraud related to an invention that could have reduced these figures needs to be taken seriously.

4 The related financial fraud

The PedSALi project should have culminated in a seminar for the European car makers, where a smart bumper that met their needs would have been unveiled.

No such seminar was held, because there were no valid research results to discuss.

Nevertheless, Manchester University still claimed expenses for holding the seminar.

This was a blatant act of financial fraud that also gave a false impression to the EPSRC that the PedSALi project had been completed successfully.

Documentary proof of the fraudulent claim for seminar expenses was presented to the enquiry panel. But my evidence was dismissed by the panel, who argued that EPSRC guidelines had not been breached.

This excuse was implausible because financial fraud is covered by English Criminal Law, not EPSRC guidelines.

Even a UKRIO panel member who had no financial training should have been aware of this.

5 Parallel developments at Cardiff University

When the EU Commission postponed the soft bumper directive, it promised to revisit the issue if a suitable design could be developed by 2012.

In 2008 an astute engineer at Cardiff University attempted to resurrect the PedSALi bumper design. His students carried out small scale research and obtained encouraging test results. Their work was presented at an International Conference on car safety in 2009.

[Huw Davies et. al., Cardiff University School of Engineering, Pedestrian Protection using a Shock Absorbing Liquid (SALi) based Bumper System, *ESV Conference, Stuttgart*, June 2009, Paper Number 09-002.]

This paper can be found online at

<http://www-nrd.nhtsa.dot.gov/pdf/esv/esv21/09-0027.pdf>

A copy of the Cardiff research paper was submitted as evidence to the formal enquiry panel. But it is not referred to in their report. This breaches one of the fundamental principles of research quality control; the comparison of experiment evidence from different research teams.

In anticipation that the formal enquiry would deliver an honest result, Dr Davies applied for EPSRC funding to carry out full scale car bumper tests. I was named as a consultant for the project.

But the enquiry process was corrupt. I was presented as professionally incompetent and blamed for the PedSALi project failure. And, in spite of the evidence placed before the panel, Dr Oyadiji was exonerated. The panel declared the original PedSALi research to be satisfactory and the report ends by recommending that Dr Oyadiji should publish more of his SALi research results.

A copy of this misleading report was sent to the EPSRC.

Quite understandably, given this damning but corrupt report, the Cardiff funding bid was rejected.

This means that a corrupt formal enquiry process involving a UKRIO representative may have been instrumental in causing unnecessary pedestrian deaths from 2012 onwards.

6 My first attempt to get the UKRIO to confront its complicity in formal enquiry fraud

For two years I lobbied Manchester University to re-examine the findings of the formal enquiry. But the University persistently refused, declaring that it was happy with the manner in which the enquiry had been conducted.

So, in August 2012, I wrote to the UKRIO requesting an investigation into its own role in the process. But my request led to nothing because I was informed that UKRIO investigations were carried out by volunteers, and no volunteers were interested in taking up my case.

The full UKRIO response is published online at <http://www.cheshire-innovation.com/UK%20Research%20Integrity%20Office.htm>

I suggest that subscribers should be deeply concerned about this UKRIO response.

- (i) Apparently, volunteers acting under the UKRIO brand name are not subject to any form of quality control, even when there is evidence that their actions undermine research integrity.
- (ii) The problem is particularly serious in this case because Dr Pablo Fernandez is a member of the UKRIO Advisory Board. What does this say about the quality of advice subscribers are receiving from the UKRIO?
- (iii) This indifference to failures of integrity within its own ranks is completely at odds with the claim on the UKRIO website that,

“We promote integrity and high ethical standards in research, as well as robust and fair methods to address poor practice and misconduct.”

7 The EPSRC casts doubt on the formal enquiry findings

In the spring of 2015, the EPSRC reviewed my evidence of PedSALi research and subsequent formal enquiry fraud. This resulted in the EPSRC writing to Manchester University calling on it to hold a fresh enquiry.

The EPSRC letter to Manchester University is reproduced at http://www.cheshire-innovation.com/sali/CrashSALi-Project_files/EPSRC%20update.htm

Following several reminders from me, Professor Luke Georghiou finally responded on behalf of the University. He declined to hold a fresh enquiry and gave two reasons for doing so.

(i) The passage of time meant that it was too late to investigate my complaints. But, I argue that the courts would throw this excuse out because the law rejected similar excuses to block fresh enquiries into the Hillsborough disaster and Birmingham pub bombings.

(ii) Professor Georghiou reinforced this argument by exploiting the good name of the UKRIO. He wrote,

“The University has recently been in communication with the external member of the panel who has confirmed his satisfaction with the conduct of the investigation.”

The high reputation of the UKRIO caused the EPSRC to think again. It sought legal advice and subsequently withdrew its call for a fresh enquiry.

I had anticipated this type of excuse being used, because the University had used it before. So in July 2015 I had taken the precaution of writing to the UKRIO, suggesting for the second time that it should re-examine its role in the Manchester formal enquiry process.

But the UKRIO dodged the issue by saying it would hold an internal investigation if called upon by Manchester University or the EPSRC. – Which did not happen.

The UKRIO seems to have manoeuvred itself into a position similar to George Orwell's *Ministry of Truth*.

It is probably the most powerful body in the UK for influencing standards of research integrity. But its status is such, that it can ignore questions about integrity within its own ranks.

To quote Dr Parry in the attached letter,

"The UKRIO has given careful consideration to your complaints but rejects your allegation of corrupt behaviour, and does not see any need for further investigation or enquiry."

It is also worth noting from the wording of the attached letter, that the UKRIO has tried to shield its representative by talking down his role in the enquiry.

However, as you can see from appendix 2 below, Dr Fernandez had the final word in writing the formal enquiry report.

8 A proposal for the UKRIO

If the UKRIO believes that I am misleading its subscribers about formal enquiry fraud, it should write to them, providing the evidence that will debunk my claims.

Alternatively, if the UKRIO absolves itself of responsibility for the behaviour of its volunteer, then it should write to Manchester University and the EPSRC as a matter of urgency.

- (i) It should inform them that Dr Fernandez's expression of satisfaction with the conduct of the enquiry cannot be accredited with UKRIO approval.
- (ii) This letter could have been sent a year ago. So the UKRIO should provide an explanation for the delay in sending it. – *A lot of pedestrians are killed or maimed on our roads in a single year.*

9 Recommendations

- 1 If the UKRIO is not prepared to impose standards of integrity and quality over its volunteers, I suggest that it should cease using them.
- 2 But, if the UKRIO continues to use volunteers under its brand name without accepting responsibility for them, this must be made transparently clear.
I would never have agreed to the appointment of Dr Pablo Fernandez as a panel member, if I had known he was a maverick, totally unaccountable to anybody.
- 3 I am fighting to expose a research and financial fraud that may be costing lives. But a volunteer operating under the UKRIO brand name has "gone native" and hindered me.
Until the UKRIO has reformed, it should remove the following statement from its website,

"We promote integrity and high ethical standards in research, as well as robust and fair methods to address poor practice and misconduct."
- 4 The question of criminal culpability for volunteers who assist in hiding financial fraud needs to be addressed.

Conclusion

Recent development in the Hillsborough and Birmingham pub bombing cases indicate that time is not a barrier to justice.

I have been fighting to expose the Manchester research and financial fraud for the last twelve years and will not give up.

I have also fought to expose the role of the UKRIO in hiding research and financial fraud for the last four years. I will not give up on this either.

Admitting that research fraudsters may have cost lives will be embarrassing for British science. But we cannot act in a totally callous and dishonest manner, simply to save face in the short term.

The longer the UKRIO remains in denial of its role, the greater the damage to the reputation of British science.

We should aspire to world leading standards of research integrity, not the lowest that we can get away with. On the following page, I offer suggestions for learning from this case in order to achieve this goal.

http://www.cheshire-innovation.com/other/science_under_attack.htm

Bill Courtney

APPENDIX 1

This is a reproduction of part of **Section Three** on the following webpage, www.cheshire-innovation.com/sali/pedsali.htm

Extract begins

This is an extract from the Formal Enquiry Report, followed by an annotated version.

(i) The original

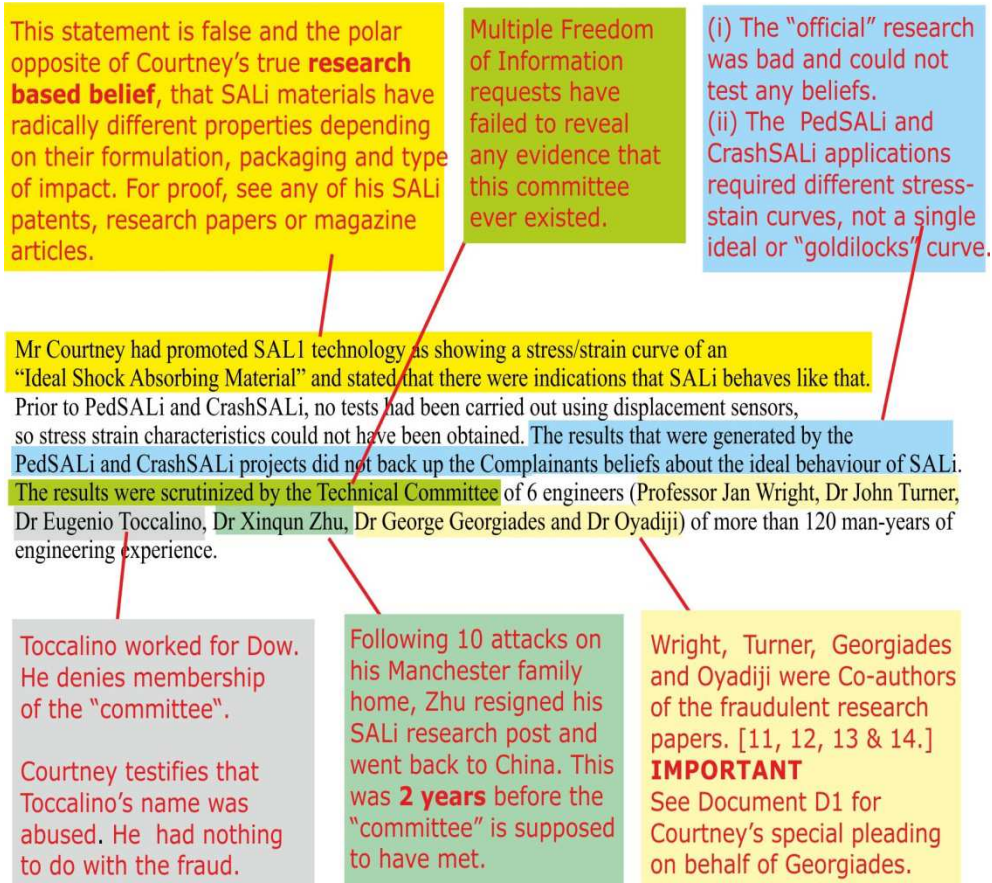
“Mr Courtney had promoted SAL1 technology as showing a stress/strain curve of an “Ideal Shock Absorbing Material” and stated that there were indications that SALi behaves like that. Prior to PedSALi and CrashSALi, no tests had been carried out using displacement sensors, so stress strain characteristics could not have been obtained. The results that were generated by the PedSALi and CrashSALi projects did not back up the Complainants beliefs about the ideal behaviour of SALi. The results were scrutinized by the Technical Committee of 6 engineers (Professor Jan Wright, Dr John Turner, Dr Eugenio Toccalino, Dr Xinqun Zhu, Dr George Georgiades and Dr Oyadiji) of more than 120 man-years of engineering experience.”

[Gleeson, Duck and Fernandez, Formal Enquiry Report, University of Manchester, January 2010.]

To the innocent eye, this extract looks plausible and damning to Courtney's professional competence.

(ii) The annotated version

This tells an entirely different story, because the whole section has been fabricated. And you, the reader, are invited to check these fabrications.



[Click to see the Dow employee's denial of membership of this committee.](#)

You should also note that the Report refers to “a stress/strain curve”. This is false and misleading because SALi based impact absorbers present different shapes of stress/strain curves for different types of impact. Courtney would have been academically stupid to believe that a single curve was involved. A more serious criticism is that it contradicted his published [2, 3, 4] and unpublished [1,18, 19, 20] research.

1984 thinking

In order to believe this section of the Report any reader familiar with the PedSALi project has to abandon logic and use doublethink.

The whole purpose of the PedSALi project was to develop a “smart” SALi filled car bumper that offered a **soft** material type **stress/strain curve** for pedestrian leg impacts but a **stiff** material type **stress/strain curve** for other impacts. Courtney’s early research had shown this was possible [See the graphs near the top of this page.]

But according to the Report, the inventor was throwing away all of the advantages of his own invention by promoting SALi as a physically impossible “Goldilocks” material having a single stress/strain curve that was just right for many types of impacts. These ranged from the two types of bumper impacts to the far wider range of impacts and vibrations that should have been investigated in the CrashSALi project.

Courtney's true beliefs about how SALi worked were supported by independent research evidence from Cardiff [4] and Nanjing [5] Universities. The Panel were sent copies of these papers, but failed to mention them in their report.

This censorship of good research adds yet another layer of deception to the panels report because they wrote,

"Prior to PedSALi and CrashSALi, no tests had been carried out using displacement sensors, so stress strain characteristics could not have been obtained. "

Yes this was strictly true, but its use to support doublethink was deception. Both the Cardiff University research [4] and the Nanjing University research [5] that the Panel **ignored** included tests using displacement sensors.

[For illustrative evidence see Figure 3 taken from reference 5 on our [CrashSALi page](#).]

It is also worth noting that it would have been physically impossible for the fictional "Technical Committee" to have tested Mr Courtney's true belief that a SALi filled bumper offered different types of stiffness depending on the type of impact because the University research [12, 13] failed to include bumper-to-bumper impact simulation tests.

Quality control underpins trust in British science. We must not allow a Formal Enquiry Panel to lower our standards by getting away with creating false evidence to hide research fraud.

Summary of this section

- 1 The Formal Enquiry Panel dodged an investigation into the original research fraud by writing a story about a "Technical Committee" that never existed.
- 2 There is clear evidence that the Technical Committee could not have existed.
 - (i) One purported member [has provided a written statement denying that he was a member](#).
 - (ii) A second purported member resigned from his post and returned to China two years before the committee was supposed to have met.
 - (iii) Freedom of Information requests submitted to Manchester University have failed to unearth any evidence of the existence of this committee.
- 3 In order to make their case, the Panel had to create a false set of beliefs that they attributed to Courtney. These "beliefs" were bizarre and made Courtney look stupid by academic standards.
- 4 The false beliefs attributed to Courtney were the polar opposite of his true evidence based beliefs.
- 5 Courtney's true beliefs, along with supporting evidence had been published in a journal paper [3]. The Panel had access to this paper and made indirect reference to it in their report.
- 6 It was Courtney's true beliefs that attracted the interest of Dow and later won EPSRC funding for the PedSALi project.

- They were referred to explicitly in the Manchester University funding proposal to the EPSRC.
- 7 The committee is supposed to have tested Courtney's beliefs against the PedSALi research evidence. But this research was flawed and [contradicted the laws of physics](#).
 - 8 Courtney's true beliefs about the "smart" variable stiffness behaviour of a SALi filled car bumper could not have been tested because the Manchester University researchers failed to carry out the necessary experiments. (But they claimed EPSRC funding for the work!)
 - 9 Cardiff University subsequently carried out the required experiments and published their results. They were in line with Courtney's predictions. A copy of the Cardiff research paper [4] was presented to the Panel, but is not referred to in their report.
 - 10 The Formal Enquiry Panel that created this secondary fraud consisted of the Heads of Physics and Maths at Manchester University and a representative of the [UK Research Integrity Office](#).

For sheer chutzpah, can any other research fraud in history trump this?

Extract ends

APPENDIX 2

The following email from the Manchester University Research Governance Office provides evidence that the UKRIO representative on the panel was the final person to approve the formal enquiry report.

From: Research Governance [mailto:research-governance@manchester.ac.uk]

Sent: 15 December 2009 09:21

To: Bill Courtney

Subject: RE: Progress with complaint

Dear Mr Courtney

I apologize for the delay in sending you the Panel's report. This is due to the fact that I am still waiting for feedback from the external member of the Panel. I have chased him a few times, but I understand he has some technical problems.

I will contact you as soon as I have the finalized report.

Mrs April Lockyer
Research Practice and Governance Co-ordinator

Research Office
Christie Building
University of Manchester
Oxford Road
Manchester M13 9PL
0161 275 8093