

# BioTecNika

## IS CSIR REALLY CORRUPT?

uncover the truth with

**DR. SHIVA AYYADURAI**

ex CEO, CSIR TECH

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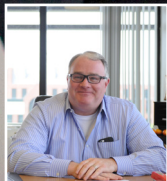
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# IS CSIR REALLY CORRUPT?

**UNCOVER THE TRUTH WITH  
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EX-CEO, CSIR TECH

**H**ired and fired within five months is indeed the worst nightmare any employee can think of. And if that happens to someone for tabling an honest report, rectifying the lopsided state of affairs at an organization, well, that is the heights of corruption. As if termination of employment was not enough, being evicted from the country within midnight, barred from contacting fellow colleagues and threatened with an arrest were icing on the cake.

The anguish of the “Inventor of Email” and a former top scientist of CSIR do not end there. Today, while Dr. Shiva Ayyadurai is taking on his fight against the corruption single handedly, there is no respite to him. Whether it was 2009 or 2015, Manmohan or Modi, there are no takers of his story. He has not just been stigmatized and ostracized from the Indian scientific community but has also been denied the right to serve his homeland.

We never complained when our fellowships were delayed, no one heard of us when we agitated against meager salary to CSIR scientists / fellows. But this is heights! The ultimate scientific body of the country not just denied the right to work to this bright professional but also is not ready to grant justice today. An initiative that would have hastened the scientific progress of our country was deplorably lost to a petty war of bruised egos and personal interests.

While CSIR is yet to respond to his allegations and provide a justifiable answer, our magazine decided to raise its voice to support for a better scientific environment and a hope for the many research professionals of the country. The incident questions the science echelons on the subservient set-up widespread in the scientific community and “Why there have been no Nobel Prize winners from India in any category of science or medicine in the last 85 years?”

How long will we have to wait before our scientific bodies learn to respect scientists and entrepreneurs and their views? How can democracy survive with such double standards? Are we proving the phrase “No Science is immune to the infection of politics and the corruption of power” to be true?

## **THE CONTROVERSY UNWINDS...**

Corruption and nepotism, which are presumed to be rampant in our political system, have now



Dr. V.A. Shiva Ayyadurai, the inventor of email and polymath, holds four degrees from MIT, is a world-renowned systems scientist, inventor and entrepreneur. He is a Fulbright Scholar, Lemelson-MIT Awards Finalist, India's First Outstanding Scientist and Technologist of Indian Origin, Westinghouse Science Talent Honors Award recipient, and a nominee for the U.S. National Medal of Technology and Innovation. Currently, he serves as the Chairman & CEO of CytoSolve, Inc., ([www.cytosolve.com](http://www.cytosolve.com)) a revolutionary biotechnology company, which develops multi-combination therapeutics, obviating the need to kill animals. As Founder of a non-profit project, Innovation Corps ([www.innovationcorps.org](http://www.innovationcorps.org)), he supports young 14-18 year old's in converting their ideas to innovations. His new book, free to anyone, "The Boy Who Invented Email and His 7 Secrets of Innovation," chronicles his journey to invent email and provides 7 key elements necessary for innovation.

crept up the walls of organizations like CSIR as well. While an Indian American scientist tries to highlight a few lacunae that the organization is burdened with, it leads to his impetuous dismissal. Dr Shiva, a world renowned scientist, with his fierce allegations against CSIR, has his statements report that the organization is a pot full of corruptions. He avers that it lacks professionalism, breeds sycophancy, is bureaucratic, and lacks a transparent commercialization arm which is hampering the scientists' confidence and innovation spirit.

Back in 2009, Dr Shiva was appointed as the first Outstanding Scientist Technologist of Indian Origin (STIO) at the Additional Secretary level of the Indian Government, the highest Scientist Level H posting possible, by the then Prime Minister Manmohan Singh of India with the directive to unleash innovation across the nearly 40 labs of the Council for Scientific and Industrial Research. He was asked to draft a report, along with his colleague Deepak Sardana, underlining the problems of CSIR leadership that need to be addressed and ensure success of CSIR-TECH.

But the intentions which were meant to support innovations in the country turned foul when hardly 72 hours after the report released, CSIR leadership demanded Dr. Shiva and Sardana to desist from any kind of oral and written communications with scientists and directors of CSIR. Followed were threats and malicious acts of hounding Shiva out of the country. Letters to the Minister of S&T, Prithivraj Chavan, the Vice-President of CSIR, and the Prime Minister of India, Manmohan Singh, went in vain. While he had to face threats, gag-orders, evictions notices and finally move out of the country, a fact that high-handedness and bureaucracy are persistent in CSIR, rings in high volume.

Amidst the uproar, Biotecnika magazine dives in deep for an accurate explanation from Dr Shiva himself who is ready to go head-on with any Indian government official and says that he can prove his stance at any point of time. "Is Shiva being the voice of many deprived scientists?", "Would he be granted justice?" Taking a look at the exclusive conversation with Dr. Shiva, the excerpts of the interview are;

*Q Could you tell us about the report drafted by you highlighting CSIR's administration? What are your thoughts six years along the line?*

Nothing has changed significantly as far as I understand. I wrote that report when I was within the organization at a very

senior level (Additional Secretary, Scientist Level H, appointed as CEO of CSIR-Tech by the PMO's office) reporting directly to the Director General. That report was a reflection of my commitment dedicated to advance scientific innovation in India. I took that role on as an amazing opportunity to serve my motherland, and money was never the motivating factor.

The observations that I made in that report, put in a nutshell, address the historical considerations in which CSIR was actually formed, which very few Indians are aware of today. The report exemplifies the feudal way in which the organization is run. Many people, who are running the organization, themselves are probably unconscious about this historical context, and as such they have been brainwashed, by a long history of feudalism, to behave like robots and suppress their fellow Indians, and Indian innovation. If we look at Indian history, and follow the thread from 1657 to today, 2015, and if you look at CSIR as an organization, it is a part of that historical experience of oppression and subjugation. India, prior to British colonialism, was on a path of freedom, to a rising merchant class, entrepreneurialism, and the dissolution of the caste system. The British actually re-imposed the caste system in India, and used it to control our people, with the intent of turning them into subservient workers, who would follow orders, not be creative or innovative.

They needed obedient slaves. In this model, the British "transferred power" from their rule as white men with crowns to a new Indian elite of brown men with white hats, who learned, well from their Masters, to oppress and suppress their fellow Indians, better than the British, ever could. In this model, the British trained the new rulers of India to be good secretaries, civil servant, engineer, and even CEO's, and Director General (DG) of CSIR. And, as such they taught the Indian ruling class to treat their fellow Indians in a very feudal like manner. Without understanding this historical context no one is going to understand how to fix CSIR. And, for that matter

fix many other aspects, which all lead to this same problem.

If you peel away the layers of the report, you come across the fact that CSIR has a feudal infrastructure and the DG thinks he is the Maharaja. Each of the lab directors runs it as though they are the local Rajas of their kingdoms. This is no personal attack on anyone, but is simply the systemic truth. You have 4,500 scientists who are treated like feudal serfs. The Lab directors do not see these scientists as equals and collaborators, but as workers, as threats, who will not upstage them, and that could lead to Lab directors loosing their roles as Rajas. That is the heart of the report.

**Q** What other aspects of CSIR administration does your report, "CSIR TECH- Path Forward" highlight?

The other part of the report is the incentive structure of CSIR, which includes as its core incentive: 1. Publishing papers, and 2. Submitting patents. It is actually a very stupid model for innovation. It may work in a basic science research lab but for organizations set up to do translational research for the masses of Indians, who need real problem solved, this is a bad idea. Innovation is not an outcome of Patents and Publications. Innovation is done by actually making a tangible product, beyond the Lab, testing the product on prospective customers, collecting customers' feedback and going back to testing, refining and iterating to create a viable solution. It is a repetitive cycle. No entrepreneur I know is focused, as the impetus for innovation, to write a paper or submit a patent. Patent is not the motivation factor to do innovation. It is something you do as a side effect to support the innovation. In the current incentive model of CSIR, people who

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have never started companies, who have no idea of what it takes to translate a discovery to an innovation, are running Labs. Most of the leadership has no knowledge on what it means to innovate, and a hands-on level. Maybe they are good lab scientists but they should not be running any of these Labs, and be expected to innovate. It's setting them and everyone up for failure. In fact, they are afraid of innovation and in turn suppress innovation, from their own subordinates. It's ironic, CSIR was setup for innovation, but it really is a Council for Suppression of Innovation & Research, as many internally refer to its leadership.

**Q** *As you say there is a feudal system up and running, do you think that could be the reason for the decreasing fund flow and slowing innovation currently in the country?*

How many great innovations came out of Britain in the last 50 years? Britain is no Silicon Valley or innovation superpower. That is the legacy British colonialism gave us. Five thousand years before British colonialism, Indians were innovative, all the time. It was Indian innovation and our raw materials and assets, which motivated Europeans to come to India. Up until the late 1800s, for example, British were stealing Indian shipbuilding blueprints from India. What's even more ironic is that during British rule, India had two Nobel Prize winners, indigenous to India, and since 1947, India has created ZERO Nobel Prize Winners indigenous in India.

At the heart of this is something really disturbing: Racism. I don't mean racism of Whites over Indians. I mean racism of Indians over Indians. The British trained us well to abuse our own people and put when one Indian is growing, another Indian will put him down, better than an "White."

Giving you an example, when I travelled India as the CEO of CSIR TECH, I went to NIO (National Institute of Oceanography). There were a few amazing young scientists who had built an underwater robot for zooplankton research, which was better than what I know

exists in the U.S. On the demonstration day, when even a few commanders from the Indian Navy were present, the Lab Director, himself did not show up! I later came to know that is the kind of environment the young scientists at CSIR face, consistently. Lab directors are jealous of their subordinates. They think that if their subordinates create something and get publicity, it would diminish him, meaning that could threaten their Kingdom.

For me this was in such contrast to my experience as a 14-year-old, working as a Research Fellow in New Jersey. There, I was in an environment where people were 30 years older than me, including my mentor. They never suppressed me or tried to diminish me. They didn't try to take away my credit for my inventing email, but encourage my innovation. My colleagues supported and encouraged me as they say my growth a reflection of their growth. I was not a threat. In feudalism, the boss gets paranoid that someone, from his own territory, might stab him in the back, like in the old palaces.

**Q** *So would you say that the people running CSIR are insecure of their positions?*

Massively, and they don't have a backbone to tell the truth publicly. Let me give you an example, Rajesh Gokhale, who runs one of the labs at CSIR, stated behind closed doors that OSDD, a highly-publicized CSIR project, is a complete fraud. And days later, at Directors' Conference with Samir Brahmachari, the DG, (who by the way recently lost his pension because the analysis showed that he had done some incredibly outrageous things, as I had written about), Gokhale was praising Brahmachari and OSDD. As another example, Girish Sahni, the current DG, who behind closed doors, called our work and critiques of the then DG, spot on, agreeing with everything that we had reported on, now wants to refute the report and its findings. People say the truth behind closed doors, but do not share it openly. It's an approach they have been taught well. They forget their duty is to the people of India, not to protect and preserve a cozy position.



**Q** Do you think being upfront in the report had made lot of people uncomfortable?

When you say “a lot of people”, CSIR has 4500 scientists and about 30 Lab Directors, which is about 0.75% of people who were made to feel uncomfortable by the Report. The other 99.25% of people did not feel uncomfortable. The day the report was sent out for feedback on October 19, 2009, within seconds, three hours before my email was shut down, I received at least 300 positive emails from scientists, across CSIR labs praising the findings. Later these scientists were threatened and suppressed to even say a peep. If an RTI was issued on the emails sent out after 19th Oct 2009, from my server, you would realize that far over a majority would agree with the findings of the report.

The silent one's, forget that they are government employees serving the citizens of India. Unfortunately, they lack the courage because they still live in the brainwashed feudal world. If you read the article written in Nature titled “Innovations Demands Freedom,” by me, I share my observations and called for an Open Forum. But, the PMO's office threatened the Editor of Nature, to pull down the article. I am still willing to do such an Open Forum, in the interest of my people as I believe that people who run CSIR do not care about Indians but are bothered only about their career, pensions and family. The core elements of that Report still are unaddressed.

**Q** Who do you think is really responsible for your being hounded out of India? Would you like to pinpoint someone who was or were responsible?

First, being an India, my loyalty is not to those who misled CSIR and abuse its scientists and assets, but to the people of India. I have no regrets in taking on the role, and would do it again, and have no regrets for the actions I took. If you look at Samir Brahmachari, he is an individual who should have never been in that role. I was privy to knowing of the back room politics, which denied someone like Lalji Singh in becoming the DG of CSIR. Samir Brahmachari worked hard to get into that role as a politician and as a PR guy, but he is really not an innovator, and not anyone, who India should have trusted to unleash innovation out of CSIR.

After this entire event, when I got back to the U.S., for example, I got a call from one of Bhrmachari's former colleagues, who said that Brahmachari, as a graduate student, had literally physically threatened him, and stole his data and published it. If this is the kind of people that rise to the top, I question their purpose and their very role as a head of the organization. Among 4,500 people, there are many incredible scientists, but feudalism, silences such people and promotes those with a weak spine.

In 2009, when I went to a Directors' meeting, an Australian guy called Ian Dean was hired by CSIR who this foreigner crores of money to advice Indians at CSIR on how to improve CSIR. In the report, he talked about the many failings of CSIR and its culture of fear. At the meeting, Mr.



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## Biotecnika's point of view:

While we present the story swirling around the CSIR controversy, we have left it on you to take a call on who is correct. To decide whether Dr. VA Shiva and his accusations are at flaw or not! There is no denying in the fact that every organization has flaws and it could never even be near perfection if its people are at fault. They are the backbone of any organization & have all the powers to make it or break it. While this blame game was an unfortunate turn of events in the history of Indian academia, what we can say is that the foundation should be strong and substantial enough to abstain people from pointing fingers at us in the future.

Dean shared a PowerPoint, including those issues and problems. We shared in our Report Mr. Dean's observations, and Mr. Dean also attempted to attack our Report. But, it was too late, because we simply published his findings, which were paid for by the Indian people. India does not deserve second-rate people without any integrity or courage, but needs courageous people to be upfront right now, so we can fix the issues and move to our well-deserved bold future.

**Q** *If you had received backing for CSIR TECH, and still in India, what all would you have done?*

First of all, many do not know this, but I started day one, without even getting paid, that's how committed I was to this mission (and, I believe the organization still owes me a months pay). But that was not why I did this. The commitment I made to CSIR was that I would do create six (6) new spin-off companies in one year from innovations I identified within CSIR. The great news is that I actually identified twelve (12), double my goals. Even if I had taken 50% of those 12, I would have hit my goal of six new companies. The people of India would have had gotten 6 spin-off companies. More importantly, the people of India would have seen the light of day of six innovations coming out of this Lab after nearly 70 years. And, that event would have provided other CSIR scientists a much needed confidence and culture that they too, as a scientist can step out of the Lab and do something productive, and break the barriers of their own a feudal environment. The truth is CSIR has an infrastructure, has tons of money,

has great people. What is missing is the right leadership across the board. People who have never run anything and not experienced in entrepreneurship cannot be expected to have CSIR rise to its great mission.

**Q** *You had written in your report that being a researcher of CSIR lab, you would like to commercialise the technologies and if CSIR does not support, you would want to start company of your own. Do you think this was holding CSIR at ransom and that is why they had to really act fast?*

Not sure what you are exactly talking about. But, we had proposed in the report that a CSIR scientist has an idea, should give the organization, CSIR, the "Right of First Refusal." This is a very common way of ensuring that things happen, and don't just sit still. Say an CSIR scientist has an amazing idea. The idea was that he can go to the Lab Director and say to him that I would like to work with CSIR to create a new company based on my idea, and that Lab Director is given some time, say 3-6 months, to make a decision. If that Lab Director sits like a lump on a log, is bureaucratic and does nothing,, scientist has every right to pursue that innovation and take it to market. This was not about "ransom" but to make the Lab Directors accountable to actually DO something in a timely manner. So, it is not holding CSIR at ransom; it's about making the organization's leadership accountable. The IAS officers think they own India. Everything occurs on their time frame. But that's not how things work. It should be on the time frame of people of India, who need innovative solutions yesterday to basic problems of hygiene,

water, etc.

**Q** *How hopeful are you with the current Modi Government? Do you think your case is going to be taken into priority?*

Modi does not belong to any legacy or dynasty. He, as an individual, in my opinion and observation, sincerely wants to help our country and is committed to that. With his leadership, I believe we have an environment and a historical opportunity for a lot of constructive conversation to put CSIR on track. He appears genuinely to want to address core and systemic issues. I look forward to working with him and his team in anyway that is constructive to unleash innovation from CSIR, which is what India deserves. The goal here is not to make it a controversy but to reach a constructive conclusion.

**Q** *What is your message to the CSIR scientists who are working out there, feeling succumbed to the transitional structure and superiors?*

Being a scientist is about the exploration of truth. So if you are a scientist, be it at CSIR or anywhere else, your commitment has to be foremost to the exploration of truth. The second and equally important commitment has to be to the communication of that truth knowing that there are uncertainties. Science is not definitive, and always has its uncertain-

ties. However, if people want to call themselves “scientists,” they have to explore truth and express that truth at all levels. Expressing that truth is not just about writing a paper or getting a publication. Writing the Report that Dr. Sardana and I did was to share our observations, and that in and of itself, was an act of being a scientist. I hope others share their observations and express their duty as a scientist. In our case, by also offering our ideas for improvement of this broken system, we were also being innovators. And in our view, the integration of science and innovation is why CSIR was created. So the scientists of CSIR must realize that their duty is to the people of India, and that by expressing openness, transparency, and discourse, they are actually being scientist. So, frankly I encourage the scientists of CSIR to be real scientists.

**Q** *If things improve and you are invited to come back and work for CSIR, would you be interested?*

My grandparents, poor farmers, worked 16 hours in the fields in a small village where I spent 20% of my life. Those are my people. Every time I go back to India, I know who my people are: the ordinary citizens who get up every day and put in a hard days work to actually creating something of value. It has always been my goal to serve my people in whichever small way I can. So as an Indian if I can do something to help, I am always here to help my motherland. Always.

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It is high time for the greater minds of scientific India realize the fact that innovation without objective is of no use. Whether or not Ayyadurai's accusations are authentic, Indian organizations are bred under the umbrella of corruption and ambiguity. Petty politics, egotism and indistinctness harbour amongst the scientific fraternity, hampering the science and research at a larger scale.

When India already is left far behind compared to the contemporaries when it comes to innovation, are the promises made by organizations to improve scientific prowess a fake? Is there an effort made towards encouraging young scientific talent or is it a false flamboyance being carried through ages? The report of Dr. Shiva has put forward the critical scenario persisting in Indian scientific community that needs to be answered immediately. A road map has to be in place making the Indian scientists' set up discovery milestones along the way. A change for good will only happen when you take your chances. But are we ready to take a chance?