Excerpt from

One of the emails I received was from a young summer intern at Bell Laboratories who had decided to present a lunch-time seminar on the georeactor. I was happy to answer the questions she had and she promised to report back after her seminar. Her seminar went well and she reported that one of the attendees had expressed plans to write a paper related to the georeactor, but she did not elaborate further.

It seems that in human affairs and in science occasionally a time arises when seemingly isolated events or circumstances come together in a mutually beneficial ways. Such a convergence of circumstances and events seems like "magic" and that seems to be the case with antineutrinos. Neutrinos and antineutrinos are elementary particles which are thought to have such little mass as to be essentially undetectable, travel at near the speed of light, and suffer so few interactions that they can literally fly through the Earth almost unimpeded.

As early as 1930, it seemed that energy appeared to be mysteriously disappearing during the process of radioactive beta decay. The energy account sheet simply did not balance. To preserve the idea that energy is neither created nor destroyed, "invisible" particles were postulated to be the agents responsible for carrying energy away unseen. Finally, in 1956 these "invisible" antineutrinos were detected experimentally [49, 50]. Subsequent detection of neutrinos from the Sun [51] and from a supernova [52, 53], and the detection of antineutrinos from nuclear fission reactors [54], coupled with observations of their apparent changing from one form to another has made the whole subject a really "hot" research area in physics. It is not surprising then that R. S. Raghavan, a neutrino expert at Bell Laboratories, after learning about the georeactor as a consequence of the lunch-time seminar at Bell Laboratories, would author a paper, entitled "Detecting a Nuclear Fission Reactor at the Center of the Earth" [55].

As early as the 1960s, there was discussion of antineutrinos being produced during the decay of radioactive elements in the Earth [56, 57]. In 1998, Raghavan was instrumental in demonstrating the feasibility of their detection [58]. Now, Raghavan's paper on detecting a deep-Earth nuclear fission reactor [55], posted on the Internet physics

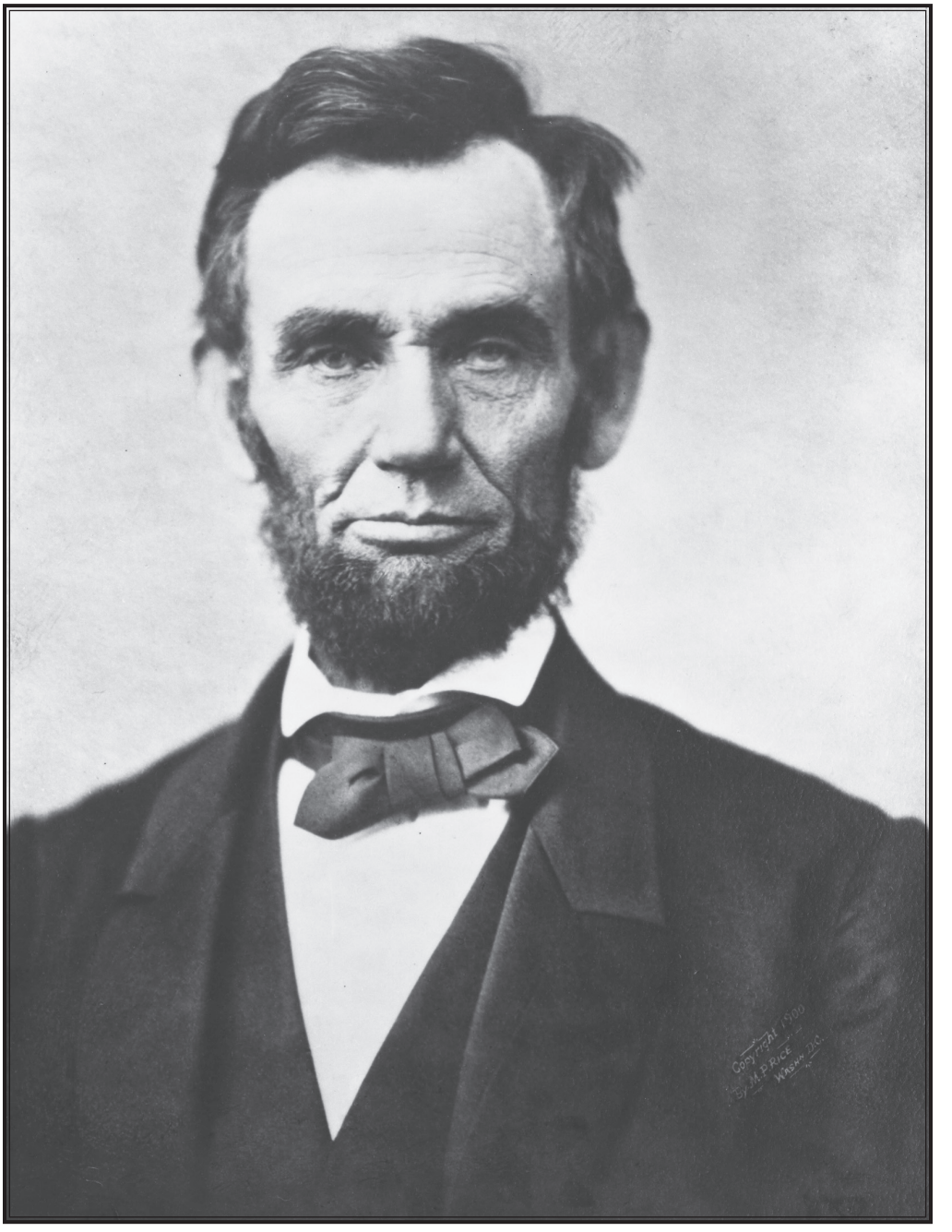
archive, arXiv.org, stimulated intense interest worldwide, with groups in Russia, Italy, and the Netherlands figuring prominently in the early appreciation georeactor-produced anti-neutrino detection [59-61] and ultimately leading to innovative new technological concepts [62-69]. Russian scientists expressed well the importance: "Herndon's idea about georeactor located at the center of the Earth, if validated, will open a new era in planetary physics" [60].

For a brief time, it looked as if science was beginning to function as it should, with openness to new ideas, with debate and discussion, and with efforts being made to attempt validation. Then along came the science-barbarians. A scientist in Europe told me that Raghavan had told him that his paper had been rejected by two journals, *Physical Review Letters* and another, because – I am paraphrasing here – one or more secret reviewers objected to my georeactor concept. To the European, the implied warning was clear: Cite Herndon's work and your own papers might not get published. If those anonymous reviews were to be subpoenaed by the U. S. Justice Department, I suspect they would show blatent misrepresentation by university faculty members, principal investigators of U. S. Government research grants to their respective universities. As a taxpayer, I would say that there is something fundamentally wrong with an institution accepting taxpayer money to conduct scientific research and at the same time acting to suppress advances in science. But that is every-day occurrence in American universities.

In 1838 in an address before the Young Men's Lyceum of Springfield, Illinois, Abraham Lincoln (1809-1865) stated:

> "At what point, then, is the approach of danger to be expected? I answer if it ever reach us it must spring up amongst us. It cannot come from abroad. If destruction be our lot, we must ourselves be its author and finisher."

More than a century later, Dwight D. Eisenhower echoed that sentiment: "Only Americans can hurt America". For more than half a century, with its self-instigated system of anonymous peer review, the U. S. National Science Foundation (NSF) has been doing what no foreign power or terrorist organization can do: Slowly, imperceptibly undermining American



Abraham Lincoln (1809-1865)

scientific capability, driving America toward third-world status in science and in education, corrupting individuals and institutions, rewarding the deceitful and the institutions that they serve, stifling creative science, and infecting the whole scientific community with a flawed anti-science practice based upon an unrealistic vision of human behavior, allowing and encouraging scientists to say what they will in secret without responsibility or accountability.

Science is about truth and reason. The purpose of science is to discover the true nature of Earth and Universe and to convey knowledge truthfully to people everywhere. Those are the ethics of the true scientist, not those of the science-barbarian.

Antineutrinos can fly through the Earth virtually unimpeded. Although vast numbers of antineutrinos can be produced, very, very few can be detected. Detection is the major challenge; huge, extremely sensitive detectors are required. But neutrino and antineutrino physics is currently a "hot" area for investigation holding the promise of potentially important discoveries, and there are groups throughout the world whose detection systems are in various stages of development. In the area of antineutrino detection, the U. S. – Japan consortium, referred to by the acronym KamLAND, is technologically well ahead of the others.

In July 2005, in a paper published in *Nature*, the KamLAND consortium reported the first detection of antineutrinos originating from within the Earth [70]. But what the paper said and what it should have said are two entirely different things. In easy to understand terms, this is what the paper should have said: In just over two years of taking data, a total of 152 "detector events" were recorded. After subtracting for the background from commercial nuclear reactors and making corrections for contamination, only 20-25 "detector events" were considered to be from antineutrinos originating within the Earth. Within the limitations of the experiment, it is absolutely impossible to ascertain the proportion of those that may have resulted from the radioactive decay of uranium and thorium, or may have been produced from a nuclear fission georeactor at the center of the Earth." Instead, what the 87 authors of the KamLAND consortium did was to mislead the scientific community and the general

public by wholly and intentionally ignoring the possibility of georeactor-produced antineutrinos. Raghavan's 1998 paper on measuring the global radioactivity in the Earth was cited [58], but not his 2002 paper "Detecting a Nuclear Fission Reactor at the Center of the Earth" [55]. And, there was absolutely no reference to any georeactor paper.

The KamLAND misrepresentation was undergirded by a "News and Views" companion article in the same issue that discussed radioactive decay heat production in the Earth, noting:

> "The remaining heat must come from other potential contributors, such as core segregation, inner-core crystallization, accretion energy or extinct radionuclides – for example the gravitational energy gained by metal accumulating at the centre of the Earth, which is converted to thermal energy, and the energy added by impacts during the Earth's initial growth [71]."

But absolutely no mention was made of georeactor-produced heat, which is on a firmer scientific foundation than some of the "other potential contributors" mentioned.

So, how stands the U. S. Department of Energy (DOE), which supported the KamLAND misrepresentation? The Director of the DOE Office of Science, writing on behalf the Secretary of DOE, stated this:

> "The following disclaimer is implicit for all scientific publications of research sponsored by the Department: … Neither the United States Government or any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed …."

Yikes! And this is from the agency responsible for the safety and security of America's entire inventory of nuclear materials and radioactive wastes.

For Japan, the detection of geo-antineutrinos by the KamLAND consortium should have been cause for celebration; instead it was cause for shame. The Japanese-born Kazuo Kuroda (aka Paul K. Kuroda) demonstrated the feasibility of naturally occurring nuclear fission reactors in uranium mines of the distant past. I published the fundamental georeactor paper "Feasibility

of a Nuclear Fission Reactor at the Center of the Earth as the Energy Source for the Geomagnetic Field" in the Japanese *Journal of Geomagnetism and Geoelectricity*. Instead of confronting new and contradictory ideas, American science-barbarians have a long and documented record of simply ignoring them, pretending that they do not exist. In announcing the detection of geo-antineutrinos, Japanese KamLAND scientists, instead of standing tall in integrity, became party to the same anti-science behavior and in doing so dishonored themselves and Japan. Curiously, all that was really required in their paper was one carefully worded sentence with appropriate references.

Science is about truth, not misrepresentation and deception. There were 87 authors of the geo-antineutrino paper, most from prestigious universities, many of whom were trained in nuclear physics. If they could refute my georeactor work, which I doubt, then they should have done so in the open literature; otherwise, my georeactor work should have been acknowledged. The KamLAND fiasco succeeded not only in misleading people on a global scale, but it also succeeded in diminishing the importance and future believability of the KamLAND experiment.

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