Explanation of Thomas F. Valone's Unconventional Ph.D. Program

My Ph.D. program was the exception to the rule that all non-accredited universities are simply "paper mills" and avenues of pseudoscience. I thought long and hard before choosing a non-accredited university to finish my terminal degree by writing a thesis and maintaining some integrity in the process. Graduate students who find themselves in an ABD (all but dissertation) situation like me, after decades of graduate part-time study with accredited universities, often have compounding factors with the school or their job that creates extenuating circumstances for years. This was true in my case. After obtaining my two bachelor degrees in Electrical Engineering and Physics (double degree) in 1974, I worked as a Research Assistant and as a Teaching Assistant in the Electrical Engineering Graduate School of the accredited State University of NY at Buffalo (SUNYAB) while maintaining a full-time graduate load. A few years later, I was hired as an instructor teaching physics, microprocessors, environmental science, technical math, and electrical technology courses at Erie Community College in Williamsville NY and also at the Erie Community College City Campus in downtown Buffalo NY, as I pursued my Master's degree in physics part time, completing it in 1984 with an unconventional master's research project, taking two years to complete, which measured back torque in the homopolar generator during its operation. It turned out to be a definitive test of whether such a generator could exceed its input power during electrical generation, that had never been done before in the scientific literature. The project and subsequent thesis was accepted by my advisory committee, in partial satisfaction of the Master's degree in physics, which I also had to defend in front of the committee of professors. My thesis was incorporated later on into my book called, *The Homopolar Handbook*, available from all book distributors. Two years later, I was also awarded a Professional Engineer's License #62475 by the State University of NY after passing the NYS qualifying examination.

In the meantime, I continually accumulated graduate physics and electrical engineering course credits which actually surpassed the 110 graduate credits required for a Ph.D. in either department at SUNYAB, thus putting me in the uncomfortable position of being ABD (all but dissertation). I even qualified for a Master's degree in Electrical Engineering but the department discouraged me since I already had one Master's degree.

As to my goal of obtaining a Ph.D., the SUNYAB curriculum and professors in both of those departments both are very traditional and do not aim toward any energy breakthroughs for graduate research projects, even though an energy crisis had been looming for decades starting in the 1970s with the oil embargo. However, I could not bear the burden of a conventional thesis that would not continue my previous graduate research into potentially new sources of energy which could benefit humanity.

As the years went on and I found a government job as a patent examiner in my midforties, I compared the online versus onsite PhD programs available in the 1990s. Back then, online degree-oriented course options were rare and very limited. Furthermore, it was disappointing to find very few science PhD programs in either type of online or onsite that would also accept my large number of transfer credits from SUNYAB without requiring the student to spend years retaking additional courses and then writing a thesis. Walden University and Union Institute are examples of an online university which are accredited but still today do not award any engineering or physics Ph.D. degree at all.

The most attractive hard science online programs in 2000 happened to be only from non-accredited PhD programs such as Kennedy-Western's general engineering program, which most

importantly, employed university professors from affiliated, accredited universities. I was concerned, as every student should be, with the view that society might take toward a non-accredited university, even with a full professor from a standard, accredited university as my thesis advisor, such as Dr. Kimberly Farah, Professor and former Department Chair, Lasell College, Massachusetts. I sought out and found other graduates who had taken that route, designing their own thesis project and found they fared quite well afterwards in their career, which they built upon the thesis topic. Therefore, upon being fired from the US Patent and Trademark Office (USPTO) in 1999 for attempting to organize the first Conference on Future Energy (COFE) at the US Department of Commerce, and getting married in 2000, I decided to use the time off to finish my PhD without moving to another city for onsite enrollment. The best university for that purpose at that time was Kennedy-Western University which accepted my unusual thesis topic of a "practical conversion of zero point energy from the quantum vacuum for useful work." Kennedy-Western also accepted most of my transfer credits, requiring only a half-dozen graduate courses that involved proctored and timed testing, and most importantly, connected me with a great thesis advisor from an accredited university.

I also visited the Kennedy-Western campus in 2001 and studied many of the bound theses of other successful PhD students in general engineering, which I found to be of great scholastic quality. Therefore, I was encouraged to be among such an unfettered yet scientifically legitimate group of researchers. Since completing my thesis, I have had colleagues, such as Rhodes Scholar, Robert Bass, PhD, Professor Garret Moddel, Professor George Miley, Professor David Nagle, and other PhDs give me praise for the pioneering and trend-setting physics content that is exhibited in my thesis and all of them have indicated the quality is as good as any of their students ever produced. Afterwards, I was even invited to lecture at the <u>U.S. Naval War College</u> in Newport R.I. on the practical conversion of zero point energy for a day to a group of commanders and subsequently, met privately with an admiral to discuss the implications of this topic.

My decision to focus on a trend-setting thesis topic of my own choice, at a time in my life when very little opportunity existed upon separation from government service, was very fruitful as a result and I have no regrets since the Ph.D. instantly established my expertise in a field where very few PhDs in the world understand the topic and its energy production potential. Since 2003, when my terminal degree was awarded, I published the thesis with the same title and have helped other graduate students at accredited universities to pursue the topic of zero point energy research successfully, including a <u>student from the University of Portugal</u> who completed a Master's degree in physics with a research project in zero point energy as well as a student from mainland China, who read my layman's version of my thesis, which I entitled, <u>Zero Point Energy: The Fuel of the Future</u>, on Amazon and all other book distributors, and then took the same route I did, getting his Master's in physics from SUNYAB but still not being able to obtain a PhD in anything related to zero point energy from that institution as late as 2010. He then transferred to the University of Colorado, where professor Garret Moddel has recently opened research avenues for quantum vacuum investigations including <u>conversion of zero-point energy</u>, which he pursues with his students in his <u>Quantum Engineering Laboratory</u>.

I also won the arbitration case with the USPTO after a six year battle and was reinstated there in 2005 with back pay since the arbitrator found that skeptical debunker, American Physical Society Public Affairs representative, and former professor from the <u>University of Maryland, Dr. Robert Park</u> was instrumental in creating a media frenzy that forced a government institution to terminate me without due cause. The full 80-page Arbitrator's Decision is posted

on the IRI website under COFE 1999. I plan to retire in 2016 and pursue a research project into zero bias diodes as thermal and non-thermal converters of ambient energy, including zero-point energy, as well as completing a spiral magnetic motor which harvests a small amount of ambient energy but is powered mostly (90%) by a powerful magnetic gradient constructed from permanent magnets. All of this relates to the topic of "free energy" which is considered to be controversial and unscientific by some but found all around us. The widely used college textbook, Taking Sides: Clashing Views in Science, Technology, and Society, by Professor Thomas Easton, published by McGraw-Hill now in its 11th edition, includes a chapter with my response to the skeptic debunker and former professor from the University of Maryland, Dr. Robert Park on the topic of whether "free energy" exists. It is a quotation from my thesis introductory chapter explaining the operation of zero point energy to sustain all electron levels in every atom and even prevent liquid helium from freezing at temperatures approaching absolute zero. An example of just one amazing zero-point energy discovery that approaches "free energy" in April, 2013, is the explanation of a molecule's behavior of motion, even though classical physics failed to account for its macroscopic internal motion. Zero-point energy moving within a pyrrole molecule is unexpectedly sensitive to the exact site occupied by the molecule on the surface, according to its discoverer, Dr. Stephen Jenkins, Cambridge University. In moving from one site to another, the 'activation energy' must include a sizeable contribution due to the change in the quantum 'zero-point energy'. "Scientists believe the effect is particularly noticeable in the case of pyrrole because the 'activation energy' needed for diffusion is particularly small, but that many other similar molecules ought to show the same kind of behavior" (Phys.org). Remarkably like dark energy, 2/3 of the activation barrier was found to be due to zero-point energy affecting the molecule. It may not be too long before my book, *Practical Conversion of Zero-Point* **Energy** becomes required reading for college physics and chemistry students.

Since my completion of my doctorate, I have regularly reported on energy breakthroughs, such as the pyrrole above, every month in a <u>Future Energy eNews</u> which is sent to thousands of subscribers (for free from integrity-research.org) and I have published in peer-reviewed journals on several energy-related topics including zero-point energy, spiral magnetic motors, and electrogravitics. All of my current journal publications are on <u>www.ResearchGate.net</u>. I have also contributed a chapter to the notable anthology, <u>Physics of the Zero Point Field and its Applications to Advanced Technology</u>, edited by Dr. Takaaki Musha, Nova Science Publishers, in 2013.

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