

## **Quantum Code Technology (QCT) Sympathetic Resonance Technology (SRT)**

### **Research Summaries In Chronological Order – Most Recent First**

**Effects Of A Passive Online Software Application On Heart Rate Variability And Autonomic Nervous System Balance. Double Blind Test. Published In The Peer Reviewed Journal For Alternative And Complimentary Medicine (JACM), January 2017.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. August 1, 2016*

A randomized, double-blinded, sham-controlled clinical trial (RCT). Twenty (20) healthy, nonsmoking subjects, 16 females and 4 males, 40 - 75 years old. Using Quantum Code Technology that was delivered through a mobile app known as Heart +, on a smart phone placed < 1 m from subjects who were seated and reading a catalog. Heart rate variability was measured for 5 minutes in triplicate for each condition using an FDA medically-approved heart rate variability measurement device.

Results: A significant reduction of 30.2% in mean LF/HF along with possible trends in mean LF decreasing by 7.3% and mean RMSSD increasing by 7.1% were observed for healthy adult subjects with the Heart + App, working in the background on an active smart phone untouched by the subjects. Therefore, it appears that QCT broadcast over a short distance can be bioactive and beneficially impact ANS regulation, reducing sympathetic dominance, the “fight or flight” response. Such effects of a passive digital technology may help regulate homeodynamics, increasing one’s ability to cope with stress, and improving overall well-being, completely effortlessly, which may enhance wellness and performance.

**Light Emission Effects (Gas Discharge Visualization) Of A Human Subject Wearing a Scarf With 4 Small 2mm QCT “Wafers” Sewn In Compared to Wearing A Scarf Without QCT Wafers. Double Blind Sham Controlled.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. October 15, 2016*

Two composed of raw silk had been prepared by the inventors and mailed separately - on different days - to Prof Rubik. Each had a 4 digit number placed. A single healthy subject, female, age 46 who reported considerable job-related stress volunteered for the study. She had no previous experience of QCT. The subject was tested by measuring the induced corona discharge from each electrified

fingertip using high voltage electrophotography using the Bio-Well Camera. Each of the subjects 10 fingertips were measured, 5 times at baseline, 5 times after wearing one of the scarfs for 10 to 15 minutes, followed by a 10-minute wash period where she sat down and wore no scarf. Lastly 5 times after wearing the other scarf for 10 to 15 minutes. This resulted in 15 independent Bio-Well scans.

Results: After the conclusion of the testing, the codes were revealed to Prof Rubik from one of the inventors. The scarf with the QCT wafers showed more significant changes in the subject's biofield including greater bioenergy and greater left-right balance.

### **Light Emission Effects (Gas Discharge Visualization) Of QCT On Eternal Water® And Evian® Water.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. March 21, 2016*

Two sets of two commercial brands of water were purchased from Safeway grocery store in Berkeley California. Temperature remained within 5 degrees throughout the course of the study. Two "coaster" type plates were used, one glass, and one glass with QCT were used to sit a glass of water on for 5, 10, and 20 mins for each test. A glass beaker containing 100 ml of each water was placed directly on top of a passive either the standard glass plate or the glass plate with QCT. Tests were conducted using the Gas Discharge Visualization (GDV) Camera Pro.

Results showed that in each case for the SRT water, the entropy of the water was decreased and more light was emitted by more than 30%. Prof Rubik stated that according to conventional science, it is impossible to add photons to an already existing material (including water) without the addition of electric current and/or artificial or real light sources, including the Sun. The fact that SRT essentially, added photons to pre-existing water, indicates a breakthrough in science. More light (photons) in water, means more life-force and vitality for humans, animals, and plants.

### **Electron Efficiency Application Of SRT On Various Electronic Components.**

*Harry Jabs, M.S., Dipl.Phys., and Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. January 8, 2014.*

Several electronic components including gas discharge tubes and capacitors with different dielectrics were tested first for baseline readings, and then, after SRT was applied for various lengths of time.

Results include: 69.7% more voltage in plasma arrestors; 317% change of impedance in capacitors; 13.1% change in phase angles in capacitors; 59% change in Re(Z) impedance in SRTiO4 Capacitors. All of these indicate less loss of electrons in conductors. Visually, the discharge region was less noisy and erratic. Jabs and Rubik stated, “all effects appeared to streamline electron flow, possibly facilitating a more orderly electron conduction, which translates to less heat generation in electronic components.”

### **Increasing Molecular Order Application Of SRT Via A New Alumina (Al2O3.2H2O/ATH) Polymer. Double Blind Test.**

*Dinesh Agrawal, Tania Slawewski, and Jiping Cheng, at Pennsylvania State University. Work supervised and data signed off by Professor Rustum Roy, Chairman of the Department of Materials Sciences at Pennsylvania State University, and William H Tiller, Professor Emeritus, Stanford University. July 25, 2010.*

20 sets of identical Alumina were created by Alcoa Corporation, Pittsburgh, Pennsylvania. 10 sets were sent to Professor Rustum Roy, Chairman of the Department of Materials Sciences at Pennsylvania State University and processed with SRT. After comparisons were made, the SRT samples were found to have significant changes in the alpha phase peaks; with a lower entropy of 36.2% compared to the control samples. Exposure to the SRT processed starting at 30 hours, and up to 120 hours yielded the same results. Professors Roy and Tiller stated that this test showed that SRT created a higher ordered (stronger) Alumina Tri-Hydrate.

### **Effects Of SRT On Commercial Aquafina® And Crystal Geysers® Bottled Waters.**

*Professor Rustum Roy and Manju Rao, PhD at Pennsylvania State University. August 4, 2008.*

Two sets of unopened Aquafina and two sets of unopened Crystal Geysers bottled waters purchased at the same time at the La Jolla Safeway store in California, were delivered to Professor Roy. One of the two sets was processed with SRT for 30 hours. Professor Roy and Dr Rao did not know which was processed and which were the control group. Temperature remained within 5 degrees at all times. Spectroscopic testing of the vibrational, rotational, and other frequency modes of the molecular structure including the inelastic scattering of monochromatic photon emissions were tested in all waters.

Results of the SRT water showed significant increase in the molecular structure primarily in the ultraviolet frequency range. There was also a significant change in the frequency of oxygen and hydrogen. Twelve more tests were conducted over the next 60 days and the results remained the same. In other words, the SRT effect did

not fade over time. Professor Roy said that, based on his previous research, if water structure remained the same for 60 days – within 5 degrees of temperature differences, the effect can be deemed as permanent. Most interesting, is that the structure of the SRT waters matched the structure of the healing waters Professor Roy had previously tested, such as waters from Lourdes. “The implications in the physics world are profound...”

### **Electron Efficiency Application Of SRT On Industrial Lithium Ion Batteries.**

*Tests conducted Prof Dinesh Agrawal, Tania Slaweki, PhD, and Jiping Cheng, PhD at Pennsylvania State University. January 11, 2008.*

An average of 2.61% increase in battery life after 30 hours of SRT processing. 12 sets of two identical industrial Lithium Ion batteries. This test was a double-blind test conducted in a constant temperature environment. When the battery was supplying electric power, the terminal marked negative, the anode, was the source of electrons and the terminal marked positive, the cathode, was the point of discharge.

Results showed that the electrolytes were able to move more efficiently as ions, allowing the chemical reactions to be completed at the separate terminals and so deliver more energy to the external circuit.

### **SRT Seed Germination And Sprout Growth: A Comparison Of SRT Treated Water And Control Water.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. September 23, 2007.*

Two sets of two commercial brands of water were purchased from Safeway grocery store in Berkeley California. Temperature remained constant. Sprout seeds from the same source were planted in two separate places. One was watered with one of the brands of water from Safeway, the other was from the same brand but processed with SRT prior to planting.

Results showed the wet sprout seed yield by weight increased by 7% and the dry sprout yield by weight increased by 4%. Dr Rubik stated this study suggest that may mean that “the number of water molecules per micro-cluster is different in the SRT water....then the biomolecules within the sprout cells may experience changes in their states of hydration, and their molecular conformations slightly different, and therefore, enzyme activities altered.” The implications for plant and human health are significant.

### **Increasing Molecular Order Application Of SRT Via A New Silicon Carbide (SiC) Polymer. Double Blind Test.**

*Professor Rustum Roy, Chairman of the Department of Materials Sciences at Pennsylvania State University. August 11, 2006.*

Two sets of identical SiC powders were created by Professor Roy. One set was exposed to SRT for 30 hours at room temperature; the others remained in an isolated area, also at room temperature. Both were analyzed to measure vibrational, rotational, and other low-frequency modes using Ramon Spectroscopy.

Results show that the SRT SiC powders were found to be significantly different than the control set, including different vibrational and rotational changes. Also, significant higher energy potentials at low frequencies were detected. In a follow up test comparing the same sets of SiC, H<sub>2</sub>O was added. The results included an 80% greater intensity of vibrational output compared to the solid sample as measured by ATR-FTIR. Professor Roy stated that this test indicates that SRT is a new method for generating polytypes, carrying different energy potentials, and as shown in this test, indicating greater order (hardness) of SiC itself.

### **Oxidative Reductive Potential (ORP) Effects Of SRT On Six Different Brands Of Commercial Bottled Waters.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. June 19, 2006*

Two sets of six different brands of water purchased from Safeway grocery store in Berkeley California at the same time and place. Temperature remained within 5 degrees constant. Half of the waters were exposed to SRT for 30 hours without opening the bottles. Waters were all tested by measuring ORP from water from each bottle.

Results included an average 6.5% decrease of ORP, meaning a decrease in voltage compared to the control samples. Dr Rubik stated, these results suggest “anti-aging properties and promotion of greater youthfulness and/or longevity because of [the] lower ORP of water.”

### **Light Emission Effects (Gas Discharge Visualization) Of SRT On Five Different Brands Of Commercial Bottled Waters.**

*Prof Beverly Rubik, Institute for Frontier Science, Oakland, CA; Energy Medicine University, Sausalito, CA; College of Integrative Medicine and Health Sciences, Saybrook University, Oakland, CA. August 25, 2005*

Two sets of five different brands of water purchased from Safeway grocery store in Berkeley California at the same time and place. Temperature remained within 5 degrees constant. Half of the waters were exposed to SRT for 30 hours without

opening the bottles. Waters were all tested by Gas Discharge Visualization (GDV) and Electrophotonic Imaging (EPI) measuring photon emissions and uniformity of light emissions.

*Results* included Significant increase in averaging 50% increase of the light emissions. Significant increase – averaging 30% of uniformity of the light emissions. The results were equal to or greater than the results of the “Life-Sustaining” waters previously tested including those tested from the flowing streams at the source at Glacier National Park, Montana and Mount Shasta, California. Dr Rubik stated that SRT “appears to ‘revive’ the bottled waters, rendering them more vital and life-supporting.”

### **SRT And Its Influence On Human Flexibility And Mobility Specific To Back Muscles And The Lumbar Vertebrae.**

*Robert M. Blaich, D.C., D.I.B.A.K., Dwight Shaneyfelt, R.N., D.C.,  
D.I.B.A.K., Rimon Issac, D.O. August 15, 2005*

25 subjects, 10 female and 15 male with an average age of 38 years old, participated in a study involving the use of the “Adam’s Test,” also called the Forward Bending Test (FBT) as standardized in the General Practitioner, Osteopathic, and Chiropractic professions for testing for scoliosis, other back problems, and basic flexibility and mobility. Major physical fitness institutions such as the Cooper Institute regularly use FBT as part of their standard health evaluation when they first take on a member, and regularly use it in testing and tracking members thereafter. Many osteopaths, chiropractors, and medical doctors as well as professional sports doctors and trainers, use the FBT in their respective professions.

*Results:* The addition of the a SRT device for less than one minute, increased flexibility and mobility for 23 of the 25 subjects tested (92%) by an average of 2.6 inches (54%). After the SRT device was removed, all subject’s flexibility and mobility decreased either back to their baseline or only slightly higher. The protocol included making sure none of the subjects strained or forced their forward position and none of them complained of pain or discomfort either before, during, or after the test.

### **Electron Efficiency Application Of SRT On Commercial Alkaline Batteries. Double Blind Test.**

*Tests conducted Percept Technology Labs, Corp, Boulder, CO. [percept.com](http://percept.com).  
June 1, 2005*

An average of 7.51% increase in battery life after 30 hours of SRT processing. 40 sets of two identical commercial alkaline AA batteries; 20 sets of Duracell

Coppertop AA and 20 sets of Energizer Max AA batteries. This test was a double-blind test conducted in a constant temperature environment. When the battery was supplying electric power, the terminal marked negative, the anode, was the source of electrons and the terminal marked positive, the cathode, was the point of discharge.

Results showed that the electrolytes were able to move more efficiently as ions, allowing the chemical reactions to be completed at the separate terminals and so deliver more energy to the external circuit.

### **SRT Effects On Brain Cell Swelling. Double Blind Test.**

*Charles Palmer, MD, ChB, Professor of Pediatric Medicine at the Milton S Hershey Medical Center, Chief Division of Newborn Medicine, Penn State Children's Hospital, Hershey, Pennsylvania. August 27, 2004.*

48 post hypoxic-ischemia neonatal rats were tested for the rate of healing of their brain trauma. [Test were conducted under the legal guidelines and supervision governance according to the Animal Welfare Act Amendment of 2002]. 26 rats were exposed to the SRT field, 22 rats were not exposed.

Results showed that the 26 rats exposed to the SRT field had an average of 36.6% reduction in brain swelling compared to the control group. Prof Palmer stated, "These results matched and/or exceeded the results generated by pharmaceutical companies for wound healing using this particular animal model which has been used around the world since 1981."

### **Effects Of SRT On The Plant Seeds Of Echinacea, Perilla, Pak Choi, And Basil. Double Blind Test.**

*Adreian Wolfe, UniGrow Farms, the United Kingdom. August 2, 2004*

Seeds from each of the crops were divided into two groups; one exposed to SRT for 36 hours before planting. Computer controlled temperature, humidity, feed, moisture, and atmosphere parameters were continually monitored.

Results: Pak-Choi showed 14% increase in emergence and continued growth; 22% more crop by weight. Basil showed 15% better emergence and continued growth; 30% more crop by weight. Echinacea showed 19% better emergence and continued growth; 32% more crop by weight. Perilla showed 300% better emergence and continued growth; 200% more crop by weight.

**NOTE: The following summaries were published in 2002 under the following title: Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies.** Rubik, B. The Journal of Alternative and Complementary Medicine. 2002 December 1. Vol 8 No 6, pp. 823-856. NOTE: Sympathetic Resonance Technology was upgraded and renamed Quantum Code Technology (QCT) in 2013.

**Inhibition Of Infections Of The Typanosoma-Cruzi Protozoan In Chagas' Disease Using SRT. Double Blind Test.**

*Professor Stuart Krassner, Chairman of the Department of Developmental and Cell Biology at the University of California at Irvine. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

Two devices with identical hardware, one utilizing SRT the programming which is invisible to the naked eye, and one without SRT programming were placed in identical Faraday controlled conditions. Three controlled and double blind test were conducted.

Results: the Faraday cages with the SRT programmed hardware and the T-cruzi averaged a 22% inhibition of transformation to infectious form and a 78% conversion to the non-infectious state. ( $p < 0.0001$ ).

**Effects Of SRT On HeLa (Cancer) Cells In-Vitro. Double Blind Test.**

*Professor Wilhelm Mosgoeller of the Institute for Cancer Research at the University of Vienna, Austria. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

Two identical cultured HeLa cells in-vitro with Mitomycin C were used. Mitomycin C is a known chemical mutagen and stressor. A SRT field generating device was turned on and placed within 1 meter of one culture.

Results of the SRT influenced culture compared to the culture without SRT resulted in 39% more dead HeLa cells. ( $p < 0.0001$ ).

**Effects Of SRT On Fibroblast (Human Tissue) Cells In-Vitro. Double Blind Test.**

*Professor Wilhelm Mosgoeller of the Institute for Cancer Research at the University of Vienna, Austria. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The*



*Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

Two identical cultured fibroblast (human tissue) cells in-vitro with Mitomycin C were used. Mitomycin C is a known chemical mutagen and stressor. A SRT field generating device was turned on and placed within 1 meter of one culture. [The SRT was the same device as used in the HeLa cell experiment above.]

Results of the SRT influenced culture compared to the culture without SRT resulted in 55.8% more alive fibroblast cells. ( $p < 0.0001$ ). Professor Mosgoeller wrote that the implications for cancer research are profound, “the good human cells became stronger and the cancer cells became weaker.”

### **A Double-Blinded Controlled Pilot Study Of The Effects Of SRT On Human EEG Responses.**

*Norman Shealy, MD, PhD, William Tiller, PhD, Timothy Smith, PhD, and Paul Thomlinson, PhD. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

27 subjects, 16 female and 11 male, ranging in age from 18 to 61 years old were randomly assigned to one of three groups of SRT pendant devices. An EMF stressor was activated while subjects were wearing one out of the three groups of pendant devices. Statistical analysis was done by using the Z-test for equality of proportions.

Results indicated that those subjects wearing the active SRT stabilizes the EEG in the presence of transient low-level EM stressors and suggest that it provides protection from stress:  $0.57 \nu 0.33$ ;  $Z = 2.3$ ;  $p < 0.01$  according to EEG measurements. It was also found that the active SRT device increases delta activity in all regions of the brain.

### **Effects Of SRT On Children With Learning Disabilities Under EM Stressors. Triple Blind Test.**

*Evelyn Wiseman, Educational Director, New Way School in Scottsdale, AZ. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

52 students ranging in age from 6 to 19. All students were failing in mainstream education for reasons including, 1) hyperactivity, 2) dyslexia, 3) mild depression, and 4) behavioral issues with teachers and peers. Digital time clocks installed with SRT circuitry and identically looking digital time clocks without SRT circuitry

were installed in each classroom. Only the parents of the study and the Educational Director knew the test was being conducted. However, the clocks were coded neither the Educational Director or the parents knew which student was in which class with the active or inactive clock.

Results showed a 38% decrease in maladaptive behaviors.

### **Effects Of SRT On Anxiety Levels Of Students In A Public School. Triple Blind Test.**

*David A Eichler, doctoral student at Holos University, Springfield, MO. Sympathetic Resonance Technology: Scientific Foundation and Summary of Biologic and Clinical Studies. Rubik, B. The Journal of Alternative and Complementary Medicine. Vol 8 No 6, pp. 823-856. December 1, 2002*

184 students, 93 male and 91 female students from eight classes of sixth grade students at a public middle school Kansas MO. The State-Trait Anxiety Inventory for Children (Spielberger, 1973) which measures both state-anxiety, the level of anxiety experienced at the given point in time at which the test is administered; and trait-anxiety, the level of anxiety experienced in general, was used.

Results showed that student anxiety levels decreased by an average of 37% ( $p < 0.059$ ).

### **Can SRT Attenuate Acute Mobile Phone-Related Changes To Neural (Brain) Function?**

*Rodney Croft, PhD, et al Can the Q Link Ally, a form of Sympathetic Resonance Technology (SRT) Attenuate Acute Mobile Phone-Related Changes to Neural Function? Published in the The Journal of Alternative and Complementary Medicine. Vol 8 No 4, pp. 427-435. October 1, 2002*

24 subjects, 16 male and 8 female, participated in a single-blind, fully counterbalanced crossover design in which subjects' resting EEG and phase-locked neural responses to auditory stimuli were assessed under conditions of either an active SRT or inactive shame device. Three readings were taken: 1) base line sitting with no cell phone, 2) sitting with a cell phone switched on behind the person's head without them knowing it was turned on, and, 3) the cell phone on plus the SRT device turned on at the same time.

Results were consistent in all subjects, the resting EEG in the gamma range, delta and alpha range changed from a stressed condition to a "restful-alert" condition.

**NOTE: The following tests were not published.**

## **Increasing Electron Efficiency And Over All Performance Of Computers With SRT. Double Blind Test.**

*Daniel West, University of California, San Diego, graduate program. 2002 April 23.*

6 identical Dell Vostro 200 PC's were tested for overall computer performance using the PassMark® Performance Test and The Open Hardware® Monitor temperature measuring program. After baseline data was recorded, 3 were exposed to SRT for 30 hours. After exposure, the SRT PCs showed an average of 12.8% improved overall performance and an average of 6.5% less heat (less loss of electrons).

## **Enhanced Athletic Gymnastic Performance On The Vault, High Bars, Parallel Bars, Rings, And Floor Exercises, With SRT On Gymnasts At United States Army Academy At West Point. Double Blind Testing Of Routines Attempted Vs Routines Successfully Completed.**

*Douglas Van Evern, PhD, West Point Gymnastic assistant coach, US Army Academy at West Point, New York. May 15, 2001*

11 male gymnasts were given identical looking pendants with SRT, 6 were plastic without SRT, 5 plastic with SRT. Neither coach Van Evern or the participants knew which were with SRT or simple plastic. Each pendant was coded by a third party. Over the course of 60 days, Coach Van Evern logged each participants routines.

Results were the participants with SRT hit 65.88% of routines attempted; participants with the sham units hit 37.54% of routine attempted. The SRT participants out-performed non-SRT participants by more than 77%.

## **Enhanced Athletic Gymnastic Performance On The Vault, High Bars, Parallel Bars, Rings, And Floor Exercise With SRT On Gymnasts At United States Army Academy At West Point. Double Blind Testing On Blood Morphology Along With Subjected Questionnaires.**

*Douglas Van Evern, PhD, West Point Gymnastic assistant coach, US Army Academy at West Point, New York. May 15, 2001*

11 male gymnasts were given identical looking pendants with SRT, 6 were plastic without SRT, 5 plastic with SRT. Neither coach Van Evern or the participants knew which were with SRT or simple plastic. Each pendant was coded by a third party. Over the course of 60 days, Coach Van Evern logged each participants routines.

Results: 90% of the participants with the SRT pendants answered yes to 1) diminished aches and pains, 2) less tired more energy, 3) improved concentration while doing routines, 4) less recovery time needed, 5) enjoyed competition more.

### **Effects Of SRT On The Stress Response Of Elite Race Horses As Determined By Live Blood Analysis. Controlled Study.**

*Christopher Manton Biochemist/Medical Technologist, B.App.ScM.Nut & Diet. Diplomat Association Nat of Live Blood Testing Pty, Ltd, Australia. August 1999.*

12 elite race horses were the subjects in this 28-day controlled study conducted. Eight horses were exposed to SRT field generating devices in the stables and a SRT Pendant placed over the breastplate of each animal. Four horses were controls unexposed to SRT. Qualitative assessment of each horse was made daily by trainers for the duration of the study. Live and dry blood analyses were also performed on intravenous blood samples initially at baseline, 72 hours, 14 days, and 28 days, at the same time of day, using a high resolution video camera mounted to a light microscope with dark field and phase contrast optics, and video data was recorded. Throughout the study, the 12 horses continued with their normal daily routine of intensive training.

Results showed that 7 of the 8 horses in the test group exhibited more motile neutrophils, better red blood cell integrity with reduced amounts of agglutination, reduced platelet aggregation, and reduced fibrin formation. The results on dry blood analyses for all 8 SRT horses showed improved clot formation with reduced polymerized protein puddles compared to the control group. These results are consistent with a reduced burden of stress on the animals exposed to SRT.

### **The Effects Of SRT On Muscle Weakness And Other Chronic Symptoms Attributed To Unnatural Electromagnetic Fields. Double Blind.**

*Robert M Blaich, DC, President of the International College of Applied Kinesiology, Mission, Kansas, and Eric Pierotti, DC, Payneham, Australia. 1998. Controlled and double blind.*

A preliminary study was first conducted by Robert M. Blaich, DC, expert in applied kinesiology (AK), who found that wearing a SRT pendant strengthened the weak muscles of subjects exposed to electromagnetic (EM) stress. A double-blind controlled pilot study was then conducted by Eric Pierotti, DC to address the following: (1) Does wearing a SRT device reduce the specific muscle weakness exacerbated by EM pollution? (2) Does wearing a SRT device for 4 months reduce patients' symptoms due to chronic EM stressors? (3) What do patients report about their status after wearing SRT devices for 4 months? 20 patients undergoing AK treatment were selected for having a variety of symptoms associated with chronic

EM field sensitivity, including headaches, back pain, allergies, and chronic muscle tension. All exhibited bilateral mid-deltoid weakness when seated at a computer. The subjects were re-tested in double-blind fashion using an active SRT device and a sham SRT device.

Results included: 17 of 20 (85%) showed a marked increase in muscle strength while exposed to an EM field source while wearing the active SRT device. They were then given the active unit to wear for 4 months. The final results show that 18 out of 20 subjects (90%) showed no muscle weakness related to the acupuncture meridian system on all visits for the duration of the study. 12 of 20 (60%) reported a marked improvement in chronic symptoms, 4 experienced improvements in at least one symptom, and 4 reported no change in status.

### **Effects Of SRT On Bacteria.**

*Daniel West, University of California, San Diego, Graduate Program. June 11, 1997*

Six sets of identical mixes of Ampicillin treated agar plates were prepared along with six identical mixes of reagents. One in each set was exposed to SRT for 30 hours. Temperature was measured and remained the same at 67 degrees in all testing situations.

Results: After a 24 hour period for each of the six sets (six days total), there was a 34% decrease in bacterial colony count.

### **Increasing Molecular Order Application Of SRT Via A New Copper (Cu) Polymer On Printed Circuit Boards. Double Blind Test.**

*Daniel West, University of California, San Diego, graduate program. February 15, 1997*

Six identical copper clad steel printed circuit boards (PCBs) were created; 3 processed with SRT and 3 unprocessed (remaining in their standard condition as per previous assays). The 6 PCB's were tested for rate of copper dissolution by placing them in ferric acid for 60 mins.

Results included an average of 7.4% more copper was dissolved with the control group compared to the SRT group within 60 mins. This indicates that a stronger copper polymer was created with SRT. The atomic weight of copper remained the same at 29 (29Cu), but the properties changed via a modulation in the molecular relationships. In this case, the modulation by SRT increased the order of the molecules as indicated by a slower dissolution in the acid. In other words, copper became harder; lasting longer, and becoming a better conductor of electricity (as seen in other studies).

## **Electron Efficiency Application Of SRT On Commercial Hearing Aid Batteries. Double Blind Test.**

*Ramesh Kaintha PhD, Vice President of Research, at Rechargeable Battery Corporation, College Station, Texas. August 1, 1995*

Ten (10) sets of two identical commercial hearing aid batteries of different brands and kinds. This test was a double-blind test conducted in a constant temperature environment. When the hearing aid battery was supplying electric power, the terminal marked negative, the anode, was the source of electrons and the terminal marked positive, the cathode, was the point of discharge.

Results showed an average of 53% increase in battery life after 30 hours of SRT processing which indicated that the electrolytes were able to move more efficiently as ions, allowing the chemical reactions to be completed at the separate terminals and so deliver more energy to the external circuit.

## **Reduction Of Digital Errors With SRT On Commercial Compact Discs. Double Blind Tests.**

*Malcolm Cecil. Audio engineer for Stevie Wonder. Testing done in Wonderland Studios, Los Angeles, CA. March 4, 1991*

Seventeen sets of two identical commercial CDs were used for this test. Double blind. One out of each set was processed with SRT, and then each was tested using the Cross-Interleaved Reed–Solomon CIRC oversampling error correction detection method. Audio engineer, Malcolm Cecil said in his many years doing this type of testing, never before has he seen such a significant reduction in error rates. The implications are that SRT enhances accuracy of digital reading and therefore, less need for redundant sampling – more music can be recorded on the same standard compact disc with the same or better audio quality. Subjectively, Stevie Wonder heard the difference in all cases, and declared that the SRT processed CD capture “more of my original emotional intentions” he had while recording his music in the studio. Several other artists conducted a double blind A/B listening test stating similar subjective experiences. Those artists include: Herbie Hancock, Joe Zawinul, Gino Vannelli, George Duke, Stanley Jordon, Steven Halpern, Iasos, and several professional audio engineers.

Results after SRT showed an average of 33% reduction in digital errors were measured, using the Cross-Interleaved Reed–Solomon CIRC oversampling error correction detection method.

END