

## The Evolution of BioMat Healing

*It's Time for a Brief History Lesson*

by Jeff Reich



The Greeks in 400BC thrived as the greatest civilization on Earth. They conquered lands, built great halls of learning, and celebrated life and love with their many deities. One of their favorite deities was Dionysus. The God of wine represents not only its intoxicating power, but also its social and beneficial influences. He is viewed as the promoter of civilization, a lawgiver, and lover of peace, as well as the patron deity of agriculture and the arts. He was also known as the Liberator, freeing one from one's normal self, by madness or ecstasy.

Unfortunately, one of the side effects of courting Dionysus is the hangover. In order to relieve its citizens of the dreadful morning after Greek Healers found a curing gemstone. A curious purple rock they bequeathed Amethystos – The Amethyst – literally translated as “Not Intoxicated”. These early physicians would lay patients on beds of amethyst, cover them with blankets of woven amethyst, sit them in caves where amethyst was present in the walls, or crush the stones into a powder and mix them into an elixir to be taken internally. The results were a calming, grounding and soothing affect delivered to their patients.

A few centuries later, in the east, holy men and physicians made it known the healing qualities of amethyst were characterized as purifying, pacifying and transitional. Amethyst has the ability to transform lower energies into higher. Amethyst is known to calm and protect the mind. It soothes those who have engaged in constant rigorous

mental activity. It has been deemed “nature’s tranquilizer” by many healers because of its effectiveness in relaxing not only the mind but also the nervous system. Those who wear amethyst jewelry and who have been recommended to wear this stone for healing purposes have done so because of its tranquil qualities and its ability to reduce negativity and alleviate anxiety.

Amethyst was identified as a crystal that functions favorably in clearing certain types of blockage and in aligning the Chakras. By transforming energies on all levels amethyst also has the ability to balance and stabilize energies located within certain Chakra areas. Amethyst is related to and found to heal and align ailments of the 6th and 7th Chakras, which are the Third Eye or Brow (6th) and the Crown (7th).

Amethyst aides the 6th Chakra, Third Eye, by opening and heightening awareness. Its calming qualities help to awaken and ease stress in this area. It helps to also heighten perspective and allows development of strong introspection (inner-self view).

The 7th Chakra, or the Crown controls the energies used in any mental activity. Amethyst helps to relieve strain or tension in this area. It is considered a helpful aide in meditation and in the facilitation of psychic visual enhancement. Its tranquil sobering effect allows those who are energetic to relax. It also is a cure for insomnia and nightmares.

The medical information provided, is at best, of a general nature and cannot substitute for the advice of a medical professional (for instance, a qualified doctor/physician, nurse, pharmacist/chemist, and so on). The BioMat Company does not treat or diagnose. Nothing included as part of any project of The BioMat Company, should be construed as an attempt to offer or render a medical opinion or otherwise engage in the practice of medicine.



As the Greeks gave way to the Romans, the Huns and finally the Europeans of the later centuries, modern science took apart the Amethyst. It is a form of SiO<sub>2</sub> (Silicon Oxide) gets its predominantly violet color from alternate layers of right-handed and left-handed quartz. Its hardness is rated a 7 on the Mohs scale with 1 being Talc (Chalk) and 10 being a diamond.



This explains why it fractures quite easily and that it is rare to find large cuts of Amethyst Jewelry anywhere in the world. Thus Amethyst has an irregular pattern in the quartz world and produces some yet scientifically unexplained characteristics with its refraction, conduction and emission of light. Recently it has been discovered that the violet color is attributed to certain iron constituents in connection with a naturally occurring ability to store and radiate light over time. Maybe scientists found out what the early healers already knew.

## Modern Times

On December 13, 1958 America sent Gordo into space in the Jupiter AM-13 program. Able and Baker went into space on May 28, 1959 in the Jupiter AM-18 mission.



Photo Credit:  
<http://www2.mvusd.k12.ca.us/eett/syoung/WDSTF/sm.htm>

What scientists learned from these historic flights was that conducted heat alone was not enough to keep these monkeys happy in the extreme cold encountered in the vacuum of space. In order to simulate the sunshine encountered on earth scientists designed a suit capable of producing Far Infrared Radiation to insulate the apes on future space missions. The apes came back more vibrant with better physiology than their predecessors.

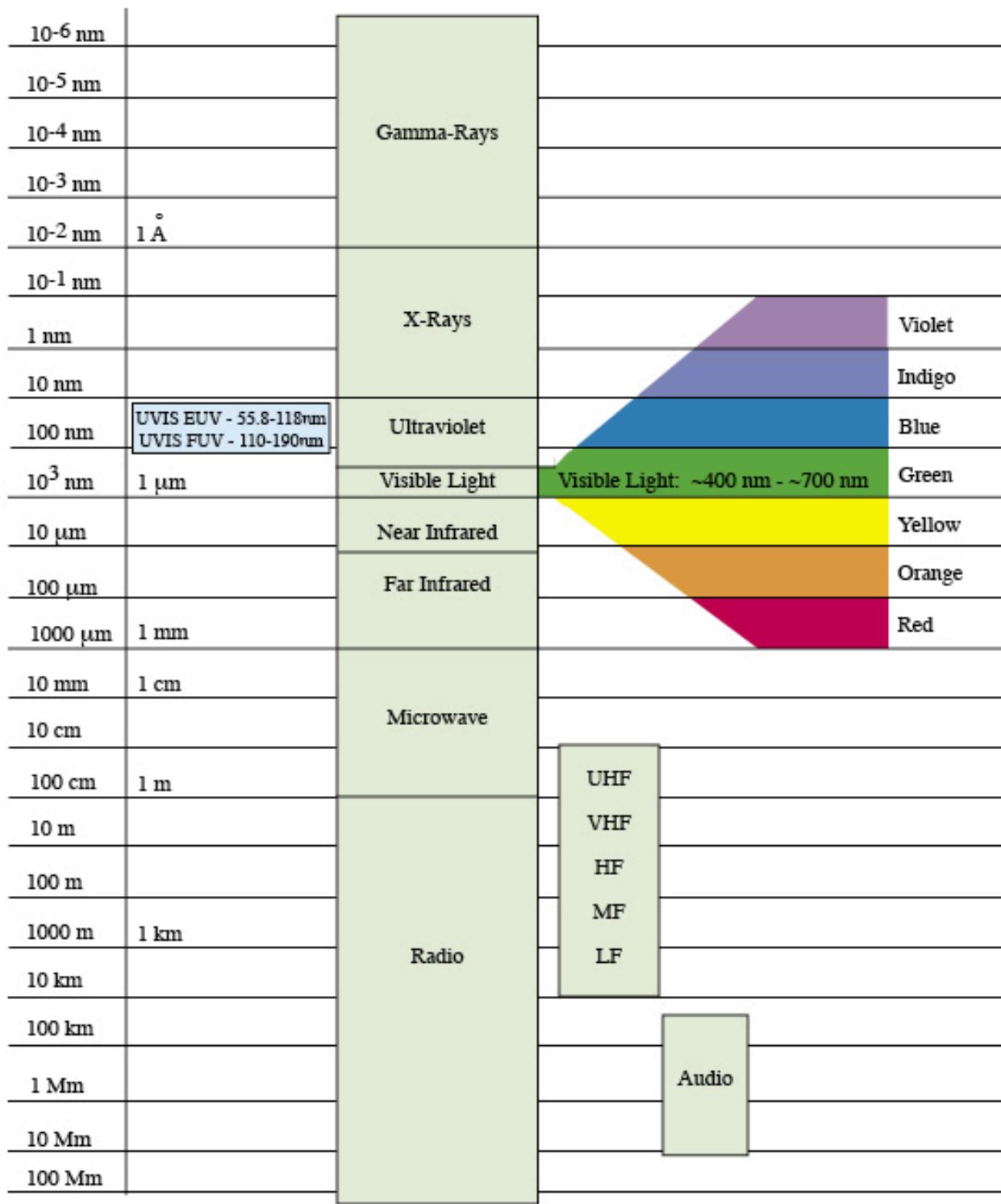
Far Infrared Radiation (FIR), what is it about this energy source our bodies enjoy. Why is it that we feel so good in the warm sun light? What makes us feel good when another human touches us and we feel the heat and warmth of their touch?

Far Infrared Radiation is that part of the electromagnetic spectrum with longer wavelengths.

The medical information provided, is at best, of a general nature and cannot substitute for the advice of a medical professional (for instance, a qualified doctor/physician, nurse, pharmacist/chemist, and so on). The BioMat Company does not treat or diagnose. Nothing included as part of any project of The BioMat Company, should be construed as an attempt to offer or render a medical opinion or otherwise engage in the practice of medicine.

# The Electromagnetic Spectrum

Chart by LASP/University of Colorado, Boulder



The visible light spectrum ranges from .4 microns to .7 microns in wavelength.  
 Ultraviolet, X-Rays and Gamma-Rays have much shorter wavelengths than visible light and cause destruction of organic molecules with exposures of any duration.



Near Infrared and Medium Infrared Light ranges from .74 microns to 4.0 microns in wavelength and is visible to some animals but is invisible to the human eye.

Far Infrared Light ranges from 4.0 microns to 400 microns and is harmless to organic molecules at the lower end of this range.

Beyond 400 microns are the Ultra-High Infrared, Microwave and Radio Wavelengths.

### How does FIR transfer into Heat?

The laws of thermodynamics state there are three ways heat can be transferred.

1. Conduction – Heat traveling from an area of high temperature to an area of low temperature within an object.
2. Convection – Heat circulation in an atmosphere of water or gas.
3. Radiation – Electromagnetic transfer even within a vacuum.

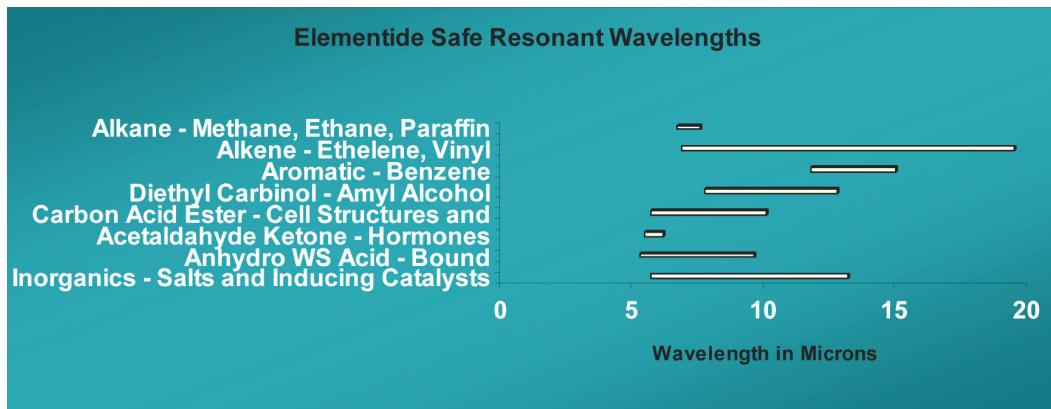


Radiation is different from the other two because with Conduction and Convection the medium must be heated before transfer may begin. Radiation transmits heat directly and spontaneously. Radiation does not need a carrier.

### How does FIR create such a deep heating in the body?

Molecules that form an object have different vibration and rotation cycles depending on many subatomic principles. These rotations and transmutations of Carbon and Oxygen containing and organic molecules in the body tend to resonate at regular cycles. This resonance is much like the frequency of a swing moving back and forth. When these molecules encounter an FIR wavelength of a resonant frequency it is much like giving that swing a push at exactly the right moment to project it further or make it more energetic. This phenomenon is called “resonant absorption.”.

Compounds containing Nitrogen or Chlorine do not resonate at the same frequencies as FIR and thus do not heat up or become more energetic as they encounter FIR.



## So what are the Physiological effects and health benefits of laying on the Biomat and receiving FIR Therapy?

### 1. Stimulation of the Autonomic Nervous System

- The Autonomic Nervous System controls homeostasis, that is the constancy of the body i.e. Heart pumping, body temperature, breathing, volume of fluids etc.
- Symptoms of ANS malfunctioning include, headache, dizziness, weakness, insomnia, cold body parts, overactive sweating, fatigue, inflammation and cancer.
- Much like acupuncture or acupressure, FIR entering through all of the conductivity points at once energizes the ANS and helps to remove any blockages helping to insure open communication pathways between the brain and all of the organs of the body.

### 2. Stimulation of the Circulatory System

- The circulatory system provides nutrients to all of the cells through Arteries, Veins, Lungs and Capillaries and other organs.
- Symptoms of a poor circulatory system are high blood pressure, arrhythmias, shortness of breath, and pain or loss of feeling in the extremities.
- By taking the deep heating effect of FIR, capillaries dilate and blood circulates more freely. This in turn prevents metabolic disorder such as blood stasis, activates tissue cells, activates secretion of enzymes and frees toxins and metabolic wastes for excretion.

### 3. Stimulation of Sweat

- Sweat helps to secrete toxins from subcutaneous fat layers under the skin
- Symptoms include cancer, pain, muscle tightness and fatigue

**The BioMat Produces FIR in a Wavelength *from 5 to 15 microns*.**

By observing the chart above it is apparent most compounds in the body cannot resonate with low or medium infrared nor infrared much above the range emitted by the Biomat.

Because of the Resonant Absorption property of FIR the heating penetration is much deeper than through absorption and convection and greater still if the FIR source is in contact with the body as with the Biomat.



### 3. Stimulation of Sweat (*continued*)

- c. Sweat helps to secrete heavy metals, carcinogens, food processing agents, lactic and free fatty acids, and surplus salt trapped in subcutaneous fat layers. This is especially important for people unable to exercise.

### 4. Other Benefits in Using The BioMat and FIR Therapy

- a. Reduction of Stress due to increased circulation and downtime used while spending time on the mat.
- b. Relief of Fatigue due to increased circulation and emission of lactic acid from muscle tissue.
- c. Relief of Stiff Muscles due to increased circulation and secretion of lactic acid from muscle tissue.
- d. Soft Tissue Repair due to molecular level rebuilding processes increased enhancing DNA synthesis through all stages of repair
- e. Relief from Arthritis due to increased circulation around joint areas an increased metabolic rate and downtime allowing the body to furnish building components for cartilage repair.
- f. Immune System Boost due to simulation of infection causing an autoimmune reaction.
- g. Lower Blood Pressure due to the increased area of capillary, arteries and veins.
- h. Weight Control due to the breakdown of toxins, salts, acids and lipids stored in subcutaneous fat layers.



The medical information provided, is at best, of a general nature and cannot substitute for the advice of a medical professional (for instance, a qualified doctor/physician, nurse, pharmacist/chemist, and so on). The BioMat Company does not treat or diagnose. Nothing included as part of any project of The BioMat Company, should be construed as an attempt to offer or render a medical opinion or otherwise engage in the practice of medicine.



### What about Negative Ions?

**N**egative ions are what make you feel so good. Positive ions make you feel slow and sluggish. Why is this? What are negative ions?

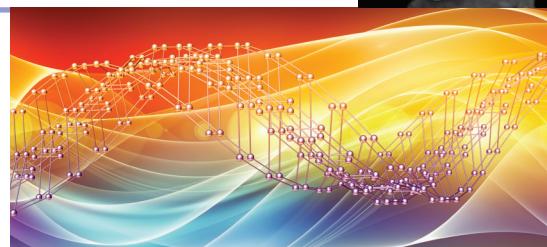
When we talk about electricity, a wire for instance that is attached to two terminals of a battery electrons will flow across the wire from the negative terminal to the positive. The positive ions of the wire stay put while the electrons jump from positive ion to positive ion across the wire. The electrons or negative ions move, while the positive ions stay put. Active vs. sluggish.

In the column of atmosphere surrounding the earth cosmic rays from the sun strike the atmosphere and ionize the gasses. This means that the gasses break up into negative ions and positive charged particles. Electrically, the sky has positive potential with respect to the earth's ground potential; therefore, the positive ions will be attracted to the ground and the negative ions will be traveling upwards toward the clouds in the sky. Near the surface of the ground, there are more negative ions than positive ions, because the positive ions are dissipated by the negative ground nearby.

### Nature's air cleaning system

Both positive ions and negative ions attach to pollutants or dust in the air, and they are either dragged down to the ground if the positive ions are attached to them or they are pulled up to the clouds if negative ions are attached to them. This is nature's way of cleansing the air.

In the highly polluted urban areas, cosmic rays cannot come down very low because of the thick layers of pollution. Therefore, there are not



enough negative ions to clean the air. It is

a vicious cycle. High in the mountains and near the ocean there is a high concentration of negative ions. The counts of negative ions are expressed mountains and near the ocean the negative ion counts are in the hundreds per cc, while in the city, the counts are generally in the single digits.

### Effects of ions on health and mood

It is reported that positive ions create depressed moods while negative ions provide euphoria. There are several brands of household negative ion generators on the market for this very reason. They are trying to simulate mountain top atmospheric condition by shooting out high counts of negative ions into the room.

One thing that the users of the negative ion generators notice is that their room walls get dirty because the negative ions cling to the dirt and dust in the air and they are carried to the walls which are positive potential relative to the minus ions. One way to look at it is that the dirt goes to the walls instead of going into your lungs. One will notice also that when the Biomat is left on all the time the negative ions will stick to dust particles and plate out on the walls of a room.

There are a couple of theories as to why negative ions give euphoric feelings while positive ions create depression. The first theory is that negative ions can move about in the body very freely. Since a negative ion means an extra electron attached to a molecule, the movement of a negative ion means the movement of an electron, which is easy. Fast moving electrons give a molecular level massage and loosen up particles stuck in some places in the body.



Positive ions are molecules with one electron missing. They provide electric fields, but the movement of an electron "hole" is slow. In other words it provides tension, but the relief of tension by the movement of an ion (electron hole) is quite slow.



When ions travel through your body, they will travel through the path of highest in terms of the number of ions in a cubic centimeter (cc). Up in the conductivity. High conductivity points correspond to the acupuncture points. So, when these ions travel through your body, they enter and leave your body through the acupuncture points, stimulating the body. Independent from your nerve network, there is an electric conduction network in your body.

If there were no high conduction network path, traveling electrons would disturb the nerve system. It is similar to a lightning rod on a building, protecting the building's plumbing and electrical wires from lightning. A traveling electron is stimulating substances along this conduction network. Acupuncture with needles also does the same thing.

The second theory is that negative ions increase alkalinity in the body while the positive ions increase acidity. As we know the water molecules are split into H<sup>+</sup> and OH<sup>-</sup>. Negative ions will neutralize H<sup>+</sup> ions and the remaining OH<sup>-</sup> ions will ionize normal unionized alkaline minerals. The net effect is to increase the alkalinity of the body. The reverse effects, i.e., the acidification of the body would be achieved with the positive ions.

The medical information provided, is at best, of a general nature and cannot substitute for the advice of a medical professional (for instance, a qualified doctor/physician, nurse, pharmacist/chemist, and so on). The BioMat Company does not treat or diagnose. Nothing included as part of any project of The BioMat Company, should be construed as an attempt to offer or render a medical opinion or otherwise engage in the practice of medicine.

These ions eventually leave the body. If they accumulate, you will get an electric shock when you touch a metallic object. The best such example is that when you are on a dry area walking on the carpet with rubber sole shoes on, you build up static electricity in your body. Then, if you touch a door knob, you get shocked. Ions and 'free radicals' cannot be stored in your body without changing your body's electric potential. Eventually they leave your body. But before they leave, they can change your body chemistry.

### How do Negative Ions Change your Body Chemistry?

Each living cell is surrounded by a membrane which separates the world within the cell from its exterior. In this membrane there are channels, through which the cell communicates with its surroundings. Those channels consist of single molecules or complexes of molecules and have the ability to allow passage of charged atoms, that is ions. The regulation of ion channels influences the life of the cell and its functions under normal and pathological conditions. The Nobel Prize in Physiology or Medicine for 1991 was awarded for the discoveries of the function of ion channels. The two German cell physiologists Erwin Neher and Bert Sakmann have together developed a technique that allows the registration of the incredibly small electrical currents (amounting to a picoampere - 10-12A) that passes through a single ion channel. The technique is unique in that it records how a single channel molecule alters its shape and in that way controls the flow of current within a time frame of a few millionths of a second.



This alteration of shape and consequential admittance of negative ions provides the following:

1. It provides for a molecular massage adjusting the size and shape of each and every cell in the body as it admits ions through cell channels.
2. It provides for the admittance of negative ions and the recombination of these negative ions with positive free radicals. The free radicals are thus neutralized and easily excreted from the cell into either sweat or into the blood stream to be processed through the Liver and Kidneys and eventually out through urine or feces.

## Summary

From the early amethyst healing beds, through the discovery of the infrared healing attributes NASA used to developed the modern spacesuit climaxing with the Nobel Prize Winning work of Neher and Sakmann, Richway Scientists have developed a healing instrument that surpasses any technology in the marketplace today. With FIR light penetrating the body 6-8 inches with energy focused and excited through a field of high quality Amethyst Crystal and supplemented by a thorough wash of negative ions, the body receives what it needs to heal itself in no way provided before.

One not only gets all of the healing energy to flush toxins from the body, clear blocked nervous pathways and negative ions to alkalize the body, but also provides oneself for a time of day to relax, meditate and find that space of peace of mind where one can rejuvenate and allow the mind to relax or explore in the comfort of ones own home.



The medical information provided, is at best, of a general nature and cannot substitute for the advice of a medical professional (for instance, a qualified doctor/physician, nurse, pharmacist/chemist, and so on). The BioMat Company does not treat or diagnose. Nothing included as part of any project of The BioMat Company, should be construed as an attempt to offer or render a medical opinion or otherwise engage in the practice of medicine.