

# Physical·Chemical Evaluation of Sosei-sui

## Outline

Water is common element among heaven(space), soil(earth), water(sea) and human(life). Water molecules formed at initial stage of space creation were drifting in space as huge steam or ice lump. Steam and ice reacted with gas and debris in space to form micro planets and sidereal stars. Galaxy system, solar system, earth and life on earth were created through repeated collisions of micro planets.

No one can deny that water accelerated evolution of space, earth and all life. The old people was right in saying that water was fundamental in creation and evolution.

It is considered that huge energy expressed as big-bang was incorporated into water 13 billion and 700 million years ago. Accordingly essence of water is energy, which is confirmed by the formula  $E=mc^2$

About 700 thousand years after big-bang, plasma space(energy vortex) inflated and lead to formation of hydrogen atom (proton), which is the first atom in space. Many atoms were formed through evolution of proton and 92 kinds of basic atoms came to exist at the initial stage of space creation. Most essential atoms are hydrogen, carbon, nitrogen and oxygen among basic atoms.

At first hydrogen and oxygen were bonded through detonating gas reaction accelerated by electron to form water. Then carbon and nitrogen were reacted with water energy to form primitive amino acid. Amino acids were polymerized to form nucleic acid, RNA, DNA and protein. It is considered that these reactions occurred in the process of growth and collapse of micro planets and sidereal stars.

Micro planets and sidereal stars are considered to be reactors or huge nuclear reactors to form various kinds of materials. Millions of tons of water were thrown into space through collapse of sidereal stars by super new planet explosion and

new planets began to be formed. One of the places where new planets are formed most is cloud complex of Orion where huge amount of water exists. According to the recent data, the cloud complex contains highly concentrated water steam to its extreme and its concentration is 20 times as much as water concentration in gas surrounding other planets and quantity is 10 million times as much as total sea water on earth. (UNIVERSAL WATER—West Marin, Ph - D)

As a result of observation of all nature including space, it was found out that formation and breakdown of water is involved in all phenomena. In other words, when water is formed huge energy is generated and when water is broken down huge energy is consumed. Space has evolved to form galaxy system, solar system, earth and life through formation and breakdown of water. It also occurs now frequently in our environment.

Typical example of water formation is thunder. When thunder cloud (water steam) is generated, energy such as electromagnetism, supersonic wave, light and other type of energy jump into intermediary stuff between clouds, in other words absorbed into water. When energy absorption reaches saturation point, lightning occurs followed by thunder bolt through insulating air. Temperature of lightning is more than 3,000 degree centigrade. Voltage between thunder cloud and earth surface sometimes reaches as high as 100 million volt, electric current is as high as 10 thousand ampere per one thunder bolt and average 20-30 coulomb of electric load is carried at 5/100,000 of a second. All types of energy such as magnetism, electric wave, light, radiation and sound are thrown out of thunder cloud at one time in addition to electricity.

Underground water in layer with a lot of granite, silica containing mica and crystal is broken down or dissociated under influence of gamma ray and high pressure. It is verified that concentration of ionized  $\text{OH}^-$  in Nordenau underground water (world famous medical water) is 20,000 times as high as that of normal water (rain water, city water)

Nordenau Water :  $(\text{H}_2\text{O}) + \text{radiation (energy)} \rightarrow \text{H}_2 \uparrow + \text{OH}^-$

Fundamental formation mechanism of Sosei-sui is considered to be the same as Nordenau underground water.

Dissociation of water (breakdown of water) can be seen at photosynthesis process

of plants.

Photosynthesis :  $6\text{H}_2\text{O} + 6\text{CO}_2 + \text{sun light} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

Water molecule absorbed through plant roots is dissociated at chloroplast. Energy for dissociation is electron originated from sun light.

Water molecule excited by electron is ionized into  $\text{H}^+$  and  $\text{OH}^-$  and hydrocarbon ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) is produced through reaction with carbon dioxide.

Formation and dissociation of water occurs also in our body, which is the base of life.

Formulation of water in respiratory chain (respiration in cell) :  $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 + 6\text{e}^- \rightarrow 6\text{H}_2\text{O} + 6\text{CO}_2 + \text{electric potential (energy)}$

Bio-energy generated is used to rotate motor of enzyme synthesis in mitochondria. (Inventor P. Boyer and J. Walker were awarded Nobel Prize of Chemistry in 1997.)

Fundamental mechanism of energy generation by rotation of mitochondria base is the same as in the case of power generation by rotating turbine at hydroelectric power station. Mitochondria produce not only ATP (which is bio-polymer) but various kinds of hormone, nerve, muscle and body temperature.

It is no exaggeration that life of living creatures is dependent on mitochondria. It should be stressed that energy of mitochondria comes from dissociated water ion. Modern medical people pay no attention to this point.

Water dissociation phenomena in human body can be seen at aquaporin in cell membrane. Water molecules going through cell membranes are dissociated and ionized under influence of electric potential in cell (120mV). Though it is small in the cell, it is equivalent to 200 thousand V out of human body.

Name of Sosei-sui comes from water considered to be existed at initial stage of space creation. Many functions Sosei-sui have are considered to come from energy contained in water. Formation process of Sosei-sui indicates that energy of water is derived by applying energy to water molecule.

Water was formed by collision of hydrogen and oxygen through detonating gas reaction and incorporation into electron cloud. This is considered to be Sosei-sui at the initial creation stage of space. Water molecules exist in network form by

bonding energy of electron. When energy is applied, electron bond is separated and water molecule is dissociated into  $H^+$  and  $OH^-$ , which is also called ionization or electric separation.

In chemical formula it is expressed as  $H_2O \rightleftharpoons H^+ + OH^-$ . (Theory of Polaron)  
 Ion product of any kind of water solution is  $10^{14}$  at temperature of  $25^\circ C$ , however ion product becomes smaller as more energy is loaded to water. Ion product of super electrolysis water is down to  $10^{12}$  and that of supercritical water is further down to  $10^{11}$ . The smaller ion product is, the more water molecule is ionized (smaller size) and hydrogen bond become easier to be broken down. It is verified that water characteristics change and functionality increases as ion product becomes smaller. (Biophysical Chemistry 107 (2004) 71—82).

Covalent bond should be broken down for water molecule to be ionized. Appropriate amount of energy is required to break down electron molecule of covalent bond. In the process of formation of Sosei-sui, starting water go through obsidian and rocks irradiating  $\gamma$  ray. Though it is not measured how much energy is irradiated into water, it is easily estimated that ion product of Sosei-sui is fairly small judging from physical and chemical test results.

## Functional Working Mechanism of Sosei-sui

### Intestinal Detoxification

Water molecule was formed through detonating gas reaction at initial space creation stage. Hydrogen atom is ionized with plus electric load ( $H^+$ ) and thrown into water solution with electron ( $e^-$ ). As a result hydrogen atom exists freely as proton and electron ( $H^+ + e^-$ ) surrounded by electron cloud and functions as free material.

Idea of ion product and water energy is on the basis of pure water. Many kinds of substances are dissolved into water in our environment. It is said that about 20 millions of substances are dissolved into our open environmental water such as river or rain water. It is also said that about 1,000 kinds of substances are dissolved into artificially treated city water.

Currently prevailing perception toward water is focused not on water itself but on substances dissolved into water. So that main water treatment technologies based on this perception are water purification through filter such as RO membrane/ion exchange plastics/PP/activated carbon, adsorption treatment and disinfection treatment such as ultraviolet rays/ozone.

Among substances dissolved into water, there are some ingredients which are essential to human body such as minor seventh metal and organic materials. In adsorption and chemical treatment it is difficult to make decision which substances to be retained or removed.

Now comes an idea to dissociate substances in water (breaking down to ion). Huge energy is required to dissociate all substances dissolved into water. In case of heat energy, about 3000°C temperature is required to dissociate one liter of city water.

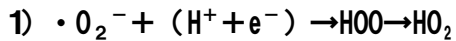
Water under critical conditions such as one at hot water outlet in deep sea connected with mantle of the earth is dissociated. Recently it is verified that outlet of hot water in deep sea is where life is originated. Sulphur bacteria, anaerobic microorganism such as oligosaccharide collected by sea research and development organizations of some countries lead to the verification. It is believed that dissociated water makes amino acid, nucleic acid, RNA and DNA, which lead to creation of the first life.

It is made clear that water is relatively easily dissociated by applying pressure, electromagnetism and radiation. Sosei-sui is considered to be dissociated by pressure and radiation.

It is verified that Sosei-sui is effective in improving intestinal environment through experiments by Dr. Tomotari Mitsuoka (Tokyo University Professor Emeritus) and Professor Atsushi Terada (Japan Veterinary and Animal Husbandry University). They made it clear that Sosei-sui makes the intestinal environment anaerobic and that lactobacillae and bifid bacteria increase and coliform bacteria, staphylococcus and clostridium are controlled.

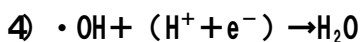
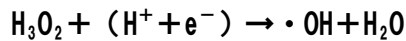
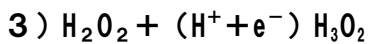
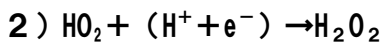
It is considered that proton and electron ( $H^+ + e^-$ ) dissociated from Sosei-sui neutralized active oxygen in intestine. In case environment turns aerobic, opportunistic microorganism such as coliform bacteria turn into toxic bacteria and welsh bacteria increases.

Detoxification mechanism of Sosei-sui is explained as follows.



$HO_2$  is a kind of active oxygen when hydroperoxide radical is formed.

$\cdot O_2^-$  and  $HO_2$  coexist in water solution. In calculation pH is 8.4 and amount of both radicals is the same.



Active oxygen is finally turned into water through 4 proton and 4 electron disproportionate reaction, which is completion of detoxification.

## Mechanism of Sosei-sui Hydrogen Generation

As is explained in outline, water of small ion product is micronized and hydrogen bond is easy to be broken down. Ordinarily water molecules form network through bonding of  $H-O \cdot \cdot \cdot H$ . Bonding angle of H and O is  $105.3^\circ$  in case of light water. Solid line  $\text{---}$  represents strong bonding of electron with energy of  $114.5 \text{ kcal}$  and dotted line  $\cdot \cdot \cdot$  represents weak bond with energy of  $4.5 \text{ kcal}$ .

Structure of actual city water or river water is more complicated with substances incorporated into bonding of  $H-O \cdot \cdot \cdot H$ . When weak hydrogen bonding is broken down, hydrogen comes out and reacts with hydrogen in substance producing hydrogen gas.  $(H^+ + e^-) + H \rightarrow H_2$

Naturally amount of  $(H^+ + e^-)$  increases with small ion product or more dissociation. So that when such substance as aluminum containing a lot of hydrogen is added to Sosei-sui containing a lot of  $(H^+ + e^-)$ , a lot of hydrogen comes out.

The more temperature or pressure are applied to water, the more hydrogen gas comes

out by vigorous water molecule movement or collision of molecules. (Henry's Formula)

The smaller ion product of water is, the more water is dissociated, producing more  $H^+$  and  $OH^-$ . Generation of hydrogen gas and improvement of intestinal environment are due to  $(H^+ + e^-)$ . At the same time, increase of  $OH^-$  amount increases solubility of water. Thus, higher amount of  $OH^-$  is the reason for high cleaning ability of Sosei-sui.