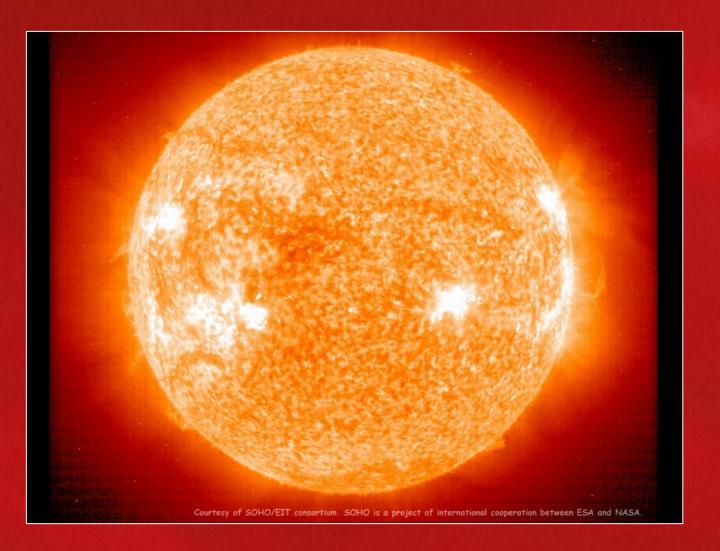
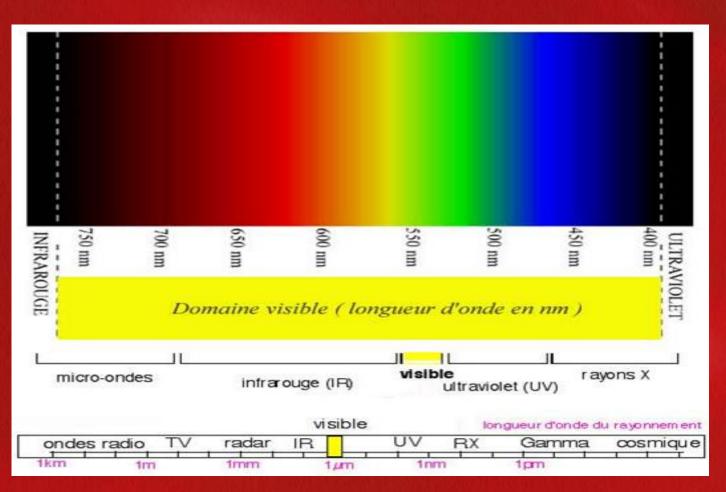
## FAR INFRA-RED TECHNOLOGY

Bio-ceramic fibres and Nikken's far infra-red technology



The sun's far infra-red energy is essentiel for life

## The Light Spectrum

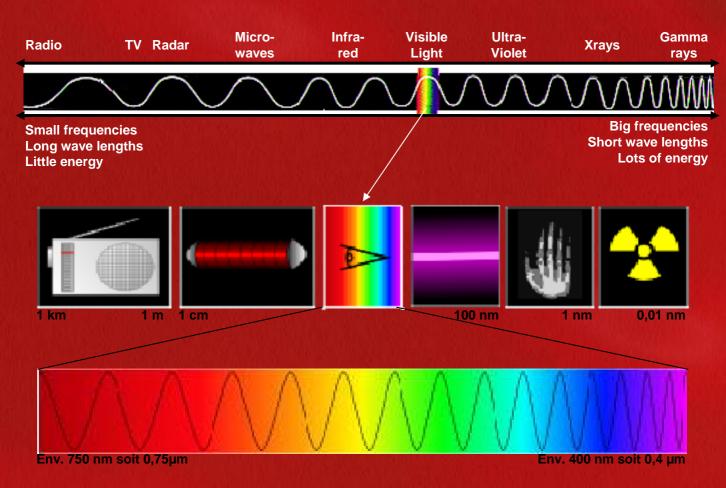


- If we make a comparison between the electromagnetic spectrum and a window that is 30 million kilometres long, visible light would only need a 3 cm wide opening in the door to pass through.
- Although radio waves, infra-red, ultra-violet, x-rays and gamma rays are all invisible « colours », they are all light waves, just like the visible waves.

The body absorbs far infra-red rays from the sun and emits them naturally.



### Far Infra-Red



#### 3 types of infra-red:

Near infra-red heats the surface but does not penetrate the tissues. Produces an irregular and intense heat (eg. The red lights that keep food warm without further cooking it)

Mid infra-red is used in remote control devices.

Far infra-red penetrates our tissues deeply and gently (the frequency is identical to that of water). It produces a uniform warmth similar to that of a warm hug.

## Nikken's patented bio-ceramic fibre

- Composed of 26 different types of ceramic mixed with mineral oxides such as silica. This mixture of materials is heated at 1600°C then let cool.
- 2 precious metals platinum and paladium are also used in the proprietary Nikken formula. These metals are instrumental in creating the 'tuning fork' effect of the fibre. All ambient light waves are converted by the fibres to the 6 to 15 micron far infra-red frequency that is so beneficial to the human body.



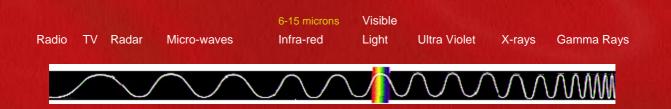
Special bio-ceramic fibres in the NIKKEN products

# Bio-ceramic fibres and Far infra-red (FIR)

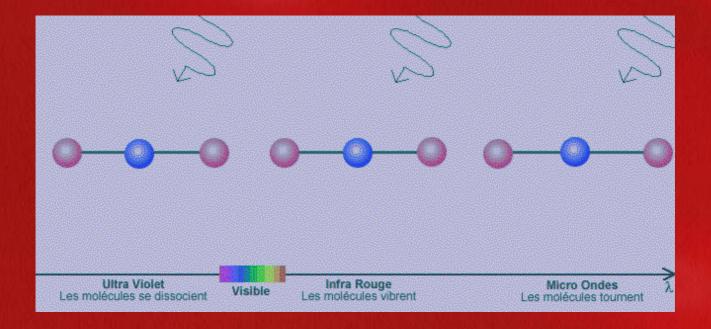
All ambient wave-lengths absorbed by the bioceramic fibres are transformed into far-infra red wave lengths of 6 to 15 microns. It is important to note that this is the part of the light spectrum with which our bodies resonate the most (because their frequency is the same as our cells at rest).

Far Infra-red (FIR) penetrates deep enough below the surface of the skin to have a positive effect on joints and bones.

Blood vessels dilate and circulation is improved with FIR. This allows for better transport of oxygen into the tissues and supports the elimination of toxins. Our cells are thereby revitalized and their regeneration is facilitated.



## Positive Effect of FIR



#### Light waves affect water molecules:

- Microwaves destabilize them.
- Ultra-violet waves break them up (thus, creating a negative effect on the body).
- Far infra-red waves, on the other hand, have a
  positive effect because their frequency is the
  same as the frequency of water. Since our bodies
  are primarily composed of water, we receive a
  huge benefit from FIR.

## **Features of Nikken FIR**

#### REFLECTION

- We spend a lot of time creating energy in order to maintain our body temperature, but heat escapes easily from our bodies. That is why we have to cover up, especially at night when we sleep.
- The bio-ceramic reflective fibres play a major role in helping us maintain that healthy temperature. The fibres absorb ambient light like a sponge absorbs water, both from the heat of our bodies and from the air around us. They then convert those light waves into FIR through a gradual and controlled manner, allowing our bodies to stay at a comfortable and healthy 37°C.

### INSULATION

The bio-ceramic reflective fibres also have an insulation effect, similar to how the insulation in a house retains heat in the winter and coolness in the summer. Therefore, the quantity of fibres in each product will influence the capacity of the product to regulate body temperature.



#### **BREATHABILITY**

When the bio-ceramic fibre reaches its capacity, in other words, when it is saturated, it allows the excess energy to escape. Thus, the body maintains an ideal temperature. This is the breathability factor.



Body temperature is effectively regulated by the bio-ceramic fibres in Nikken's products.

## **Benefits of FIR products**

- The comforter facilitates sleep by permitting our bodies to redirect the energy that is normally used to maintain our temperature at 37°C to other vital functions.
- FIR diminishes the acidity of the body
- FIR promotes cellular repair and regeneration.
- FIR facilitates the soothing of stress and tension.

