## New Botanical Extracts for cosmetics – based on Traditional Chinese Medicine (TCM).

Manfred Axterer, Dr. Joachim Röding, Symrise GmbH & Co, Germany.

For thousands of years, the Chinese have documented more than 7,000 types of herbs possessing healing benefits. The traditional Chinese Medicine is the oldest continuous surviving medical tradition, rivaled only by Ayurvedic medicine in India. The knowledge of Chinese herbs originated from the earliest habitants. Historical records begin with Shen Nong (legendary supernatural farmer) who lived about 5,000 years ago. The most well known Chinese herbal literature is the Ben Cao Gang Mu compiled by Li Shi-Zhen in 1590. The book records 1,892 medicines and contains 11,096 formulas.

Modern Western Medicine has an allopathic view, which is focussed on symptoms and only considers the obvious ill part of the patient, its treatment can be seen as "anti-symptoms". TCM is a holistic medicine which is focussed on the patient and considers spirit, body nourishment, lifestyle, relationships, work, leisure and many more influences in the patient's life working as a "rebalance cure". Not only the symptoms are treated but the whole human system. The fundamental theory of TCM is Yin-Yang balance in which everything holds two opposite forces. Only with this balance, our body can achieve harmony, which gives strength and health. Medicinal properties of Chinese herbs are considered a methodological theory based on the nature and function of herbs and can be generalized as having Four Natures and Five Kind of Tastes.

The four natures are **Cold, Hot, Warm** and **Cool**. They are generalized according to the reaction of the body after the herbs are administered. Cold and Cool herbs have the actions of relieving or removing heat symptoms and can generally be used for clearing away heat, pathogenic fire and detoxification. Warm and Hot herbs relieve or remove cold symptoms and can generally be used for dispelling cold, warming the interior and invigorating yang. There are some other herbs whose properties are not so obvious, they are mild and called Medium property herbs

The five kind of tastes are **Pungent, Sweet, Sour, Bitter**, and **Salty**. Pungent herbs are mainly used for dispersing and activating the blood circulation, sweet nourishes blood, relieves pain and harmonizes the action of different herbs, sours are used for astringent and arresting discharge, bitter for purging, eliminating and dispelling heat. Salty herbs are softening and relieving hard mass.

A good herbal formula will have a link between;

- the Five Elements = Fire. Metal. Wood. Earth. Water.
- Yin and Yang,
- the Four Natures.
- the Body Organs,
- the Five Characteristic Tastes.

The Five Elements are together with Yin and Yang the basic modules of the Chinese universe. The principles of the Five Elements can be assigned to everything.

The five elements do not relate directly with a single herb. They relate with the human organs. Earth is associated with mouth, lips, muscles, the color yellow, summer and moisture. Metal is associated with skin, nose, lung, body-hair, autumn and dryness. Water is the element of kidney, bleb, ears, hair (head), bones and the color black. Wood is the element of liver, eyes, spring, green and wind. Fire is associated with heart, tongue, blood and complexion.

The Five Elements are connected through interactions and cycles. The outer circle is the circle of creation – every element is producing the next within the circle – water produces wood – wood makes fire – fire makes earth – earth produces metals and minerals, which filter and so cleanse water, which nourishes the trees.

The inner circle is the circle of control – water controls fire – fire makes metals malleable – the hard metals can form wood – the structure of roots stabilizes earth – earth gives the water its form.

These principles of the TCM give a short account of what is behind this old and very successful medical tradition. The use of herbs as described below has been documented for centuries and offers new opportunities for the use in cosmetic products.

For the development of TCM-Extracts Symrise has been working together with Prof. Dr. Chou Guixin of the Research Center for Standardization of Chinese Medicines at the Shanghai University of TCM, who has been working with TCM for more than twenty years.

