

The PST® signal

What is so special about the PST® signal?



The essential differences between Pulsed Signal Therapy® (PST®) and traditional magnetic field therapy, such as the Kraus-Lechner-coil (alternating current oriented magnetic field) are clearly visible in the illustrations and graphics on page 9.

Clarification

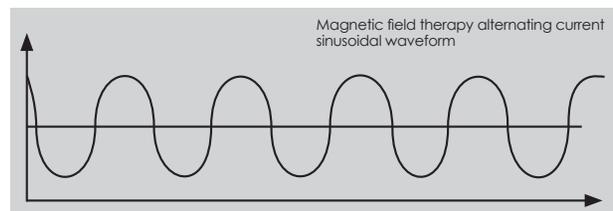
The starting point is that PST® stimulates higher chondrocyte activity. To actually activate such a situation, it is necessary to:

1. Work with changing stimuli, as a permanently repeated similar impulse or stimulus of the cells is quickly perceived as inadequate;
2. Cover the whole sensitivity range of the chondrocytes by an appropriate stimuli pattern.

Besides the main physical parameters examined here - wave form, field strength and frequency - there are other important characteristic features, such as energy carriers, work cycle, impulse frequency, implementation etc. which are fundamentally different in these three therapy methods.

1. Kraus-Lechner System Coil

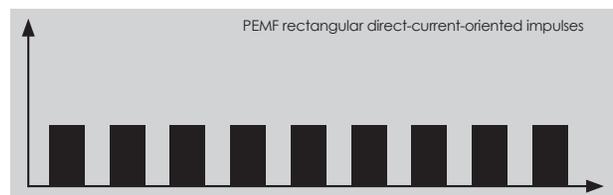
This system coil delivers an alternating current magnetic field that generates a sinusoidal waveform. This signal does not conform to what normally takes place in the body because electric activities in all living organisms follow only direct current oriented processes.



1. Kraus-Lechner type system with alternating current oriented magnetic field

2. PEMF - Pulsed electromagnetic field

PEMF, which works with pulsed electromagnetic fields, utilizes a direct-current-oriented constantly repeated signal. It is transmitted at a specific intensity and a particular frequency and it remains constant during the treatment. Work and research on PEMF, including in vitro studies with cell cultures, constituted the essential foundation for the development of the PST® technology by Dr. Dr. Richard Markoll.



2. PEMF - pulsed magnetic field therapies

3. PST® - Pulsed Signal Therapy®

PST® should be seen as the logical evolution of PEMF technology. In contrast to PEMF, PST® generates a pure magnetic field output signal that employs direct current with unidirectional biological frequencies. The “waveform” is quasi-rectangular. PST® delivers changing pulsed electromagnetic signals in an alternating fashion. The intensity of impulses lies predominantly in the range between 10 and 30 Hertz. PST® therefore functions at a relatively low frequency, and in a low energetic range of field strength.



3. Pulsed Signal Therapy®