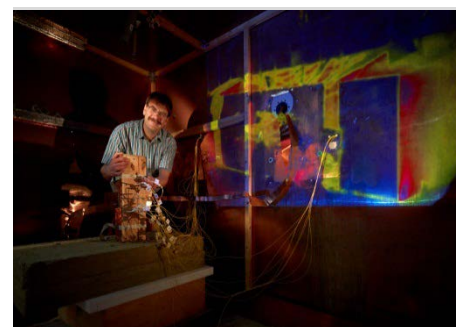
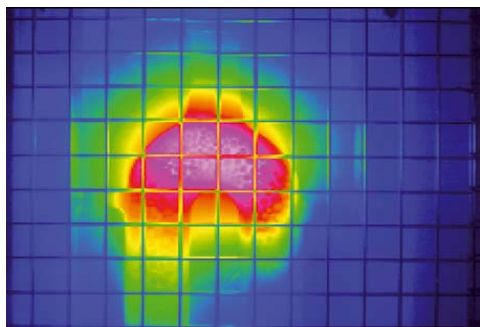


# Radio wave technology platform for environmental technology and power engineering

Application of electromagnetic waves for heating contaminated solid materials, adsorbents and catalysts



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Radio wave (RW) technology as a means of direct energy transfer was developed to a platform allowing the application of scientific and engineering know how to solve various problems in environmental technology and power engineering. It is based on the interaction of electromagnetic waves with various materials leading to controlled heating. In particular, direct dielectric heating with RW energy can provide homogeneous heating of relatively large volumes in technical scale.

Another option is to achieve selective heating of certain components in a complex system. This can be realized in mechanical mixtures and structured arrangements but also by utilizing a coupling medium in order to initiate dynamic phenomena of selective heating (so-called thermo-chromatographic pulses).

Beside heating, application of RW can also be used for an electrodeless dissociation of water leading to the formation of hydrogen.

The flexibility of the RW technology can be used for a variety of applications such as soil remediation, off-gas cleaning, biogas upgrading or drying and decontamination of brickwork or timber.