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Holographic method as a powerful tool for investigating chemical reactions: experimental setup

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Holography, i.e. holographic interferometry, is a method that records the deformation, i.e. the dynamics of the process between two or more moments of exposure. [1] The presented work defined the holographic method with an appropriate experimental setup. The experimental setup consists of optical components specially designed for measuring chemical reactions. This setup is specific because it has the possibility of so-called triple recording [2]. The possibility of observing the process without disturbing it is of great importance for the investigation of very sensitive chemical reactions, such as oscillatory reactions. This kind of experimental setup opens up possibilities for exploring the profiles of various chemical reactions on the nanoscale; especially iodate-based oscillatory reactions for which the exact mechanism is still unknown.

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