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Transient vibrational circular dichroism spectrometer: technical development

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Abstract. We recently reported the first measurements of transient VCD in the C-H-stretch region following visible excitation of cobalt(-)-spartein complex (Co(sp)Cl2) with picosecond time resolution [1]. This poster presents the detailed description of the setup based on the synchronization of a femtosecond laser system with a photo elastic modulator [2]. A very precise control of the probe pulse polarization is a requirement to avoid linear dichroism artefacts. This is particularly important in crossed polarizer "quasi-null" technique which can be used to significantly enhance chiral signals [3].

References

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