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**An investigation of energy transfer
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derivatives in liquid medium**

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Abstract: The energy transfer between coumarin 35 (C35) and pyronin compounds, which are xanthene derivatives, i.e. pyronin B (PyB) and pyronin Y (PyY), in methanol was investigated at room temperature by using steady-state absorption, emission, and time-resolved fluorescence spectroscopy. Fluorescence energy transfer rate constants (k_T) and critical radius (R_0) were determined for C35-PyB and C35-PyY molecular pairs in methanol. The obtained values of k_T and R_0 indicated that the dipole-dipole interaction between C35-PyB and C35-PyY molecular pairs accounted for