

ADDITIONS AND CORRECTIONS

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K. A. Zachariasse, T. Yoshihara, and S. I. Druzhinin: Picosecond and Nanosecond Fluorescence Decays of 4-(Dimethylamino)phenylacetylene in Comparison with Those of 4-(Dimethylamino)benzoxazole. No Evidence for Intramolecular Charge Transfer and a Nonfluorescing Intramolecular Charge Transfer State

Pages 6326 and 6327. Because of a software error in a recent spectrofluorometer calibration (multiplication by the

wavelength λ instead of by λ^2), the fluorescence spectra in Figure 1 are energy spectra and not quantum spectra as stated. As a consequence, also the data in Table 1 which depend on the fluorescence spectra were recalculated. The correct quantum-corrected fluorescence spectra are shown in the new Figure 1, and the corrected fluorescence data appear in the new Table 1. The conclusions of the paper are not affected.

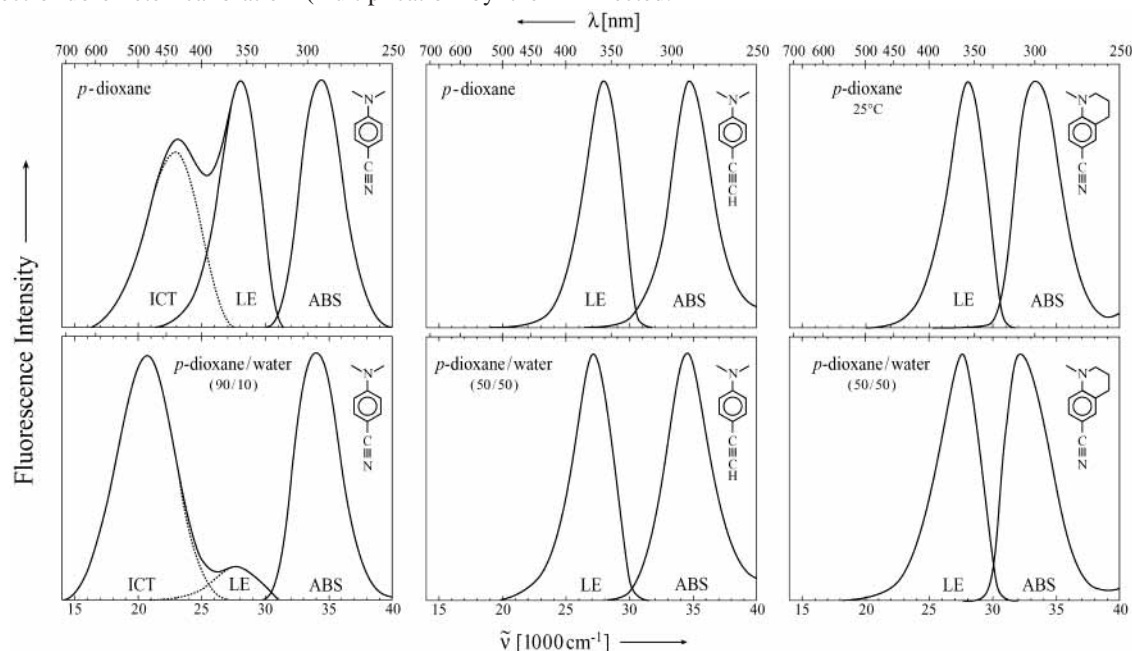


Figure 1. Fluorescence and absorption spectra (normalized) at 25 °C of (left) 4-(dimethylamino)benzoxazole (DMABN) in *p*-dioxane and *p*-dioxane/water (90/10 volume fraction), (middle) 4-(dimethylamino)phenylacetylene (DACET) in *p*-dioxane and *p*-dioxane/water (50/50), and (right) 1-methyl-6-cyano-1,2,3,4-tetrahydroquinoline (NMCQ) in *p*-dioxane and *p*-dioxane/water (50/50). The fluorescence spectrum of DMABN consists of emissions from a locally excited (LE) and an intramolecular charge transfer (ICT) state, whereas with DACET and NMCQ only a single LE emission is observed. 4-(Methylamino)benzoxazole (MABN) was used as the model compound for LE in the separation of the LE and ICT contributions to the fluorescence spectra of DMABN.

TABLE 1: Fluorescence Quantum Yields, Φ_f , Maxima, ν^{\max} , of the Absorption and Fluorescence Spectra, and Energy, $E(S_1)$, for DMABN, DACET, and NMCQ in *p*-Dioxane and *p*-Dioxane/Water Mixtures at 25 °C, See Figure 1

| | solvent composition (<i>p</i> -dioxane/water) | DMABN | DACET | NMCQ |
|---|--|--|-------|-------|
| Φ_f | (100/0) | 0.032 (LE) 0.037 (ICT) 1.16 ($\Phi'(\text{ICT})/\Phi(\text{LE})$) | 0.15 | 0.23 |
| | (90/10) | 0.0020 (LE) 0.025 (ICT) 12.5 ($\Phi'(\text{ICT})/\Phi(\text{LE})$) | 0.082 | 0.16 |
| | (50/50) | 0.0003 (LE) 0.0069 (ICT) 23 ($\Phi'(\text{ICT})/\Phi(\text{LE})$) | 0.017 | 0.017 |
| $\nu^{\max}(\text{abs})$ [1000 cm ⁻¹] | (100/0) | 34.62 | 34.82 | 33.56 |
| | (90/10) | 34.20 | 34.73 | 32.88 |
| | (50/50) | 33.37 | 34.63 | 32.29 |
| $\nu^{\max}(\text{flu})$ [1000 cm ⁻¹] | (100/0) | 28.13 (LE) 22.92 (ICT) | 27.98 | 28.11 |
| | (90/10) | 27.85 (LE) 20.54 (ICT) | 27.68 | 27.85 |
| | (50/50) | 27.73 (LE) 19.06 (ICT) | 27.33 | 27.55 |
| $E(S_1)$ [1000 cm ⁻¹] ^a | (100/0) | 31.05 | 30.55 | 30.62 |
| | (90/10) | 30.92 | 30.39 | 30.41 |
| | (50/50) | 30.21 | 30.21 | 30.10 |

^a The energy of the crossing of the absorption and fluorescence spectra.

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