

ERRATA

In the paper "Luminescence and Anisotropy Decays of *N*-3-Pyrene Maleimide Labeling IgG Proteins and Cells" by S. Benci, G. Bottiroli, G. Schianchi, S. Vaccari, and P. Vaghi that appeared in *Journal of Fluorescence*, Vol. 3, No. 4, 1993, pp. 223–227, Table I was printed with an incorrect value. In the column where f_2 values are listed, the first value of the column 0.50 ± 12 is incorrect. The value should be 0.50 ± 0.12 .

Also, the authors would like to add the following to the Acknowledgments: This work has been supported by a grant of the C.N.R. Target Project "Biotecnologie e Biostrumentazione."

In the paper "Steady-State and Time-Resolved Phosphorescence of Wild-Type and Modified Bacteriophage λ *cI* Repressors" by Aaron K. Sato, Eric R. Bitten, Donald F. Seneor, J. B. Alexander Ross, and Kenneth W. Rouslang that was printed in *Journal of Fluorescence*, Vol. 4, No. 2, 1994, pp. 195–201, p. 201 carried a defect whereby portions of text were missing. The complete text that should have appeared on p. 201 is printed on the following page.

in similar microenvironments to the wild-type tryptophans.

Similar to the results with NATrpA and wild-type, the 5-OHTrp model and SEP triplet-state decays are composed of one and three exponentials, respectively (Table II). In addition, the fractional contributions of the three components in SEP are distributed in nearly the same way as in wild-type and Y88C repressors.

Because there is 95% replacement of tryptophan with 5-OHTrp in the SEP, the possibility arises that free tryptophan contributes to both the steady-state and the time-resolved phosphorescence. To verify that the SEP emission is free of phosphorescence from unmodified tryptophan, we characterized a sample of 15-fold molar excess of NATrpA with SEP. When exciting at 315 nm, the steady-state phosphorescence of SEP by itself is indistinguishable from that of the mixture of SEP and NATrpA, demonstrating that unmodified tryptophan makes no detectable contribution to the SEP phosphorescence emission excited at 315.0 nm (Fig. 4).

Based upon the phosphorescence results, we have demonstrated that 5-OHTrp- λ repressor serves as a faithful spectroscopic analogue of wild-type repressor. Because we can selectively excite and detect phosphorescence from the 5-OHTrp moieties even in the presence of excess tryptophan, we have shown that an SEP is potentially an excellent candidate for studying one protein in the presence of others. Work is currently under way to explore the use of SEP λ repressor in conjunction with its operator DNA.

ACKNOWLEDGMENTS

The authors are grateful for support from the M.J. Murdock Charitable Trust and the Northwest Area Foundation of Research Corporation.

REFERENCES

1. C. Hausteine, W. D. Savage, C. F. Ishak, and R. T. Pflaum (1989) *Talanta* **36**, 1065–1068.
2. C. W. V. Hogue, I. Rasquinha, A. G. Szabo, and J. P. MacManus (1992) *FEBS Lett.* **310**, 269–272.
3. S. R. Jordon and C. O. Pabo (1988) *Science* **242**, 893–899.
4. J. W. Longworth (1971) in R. F. Steiner and G. Weinryb (Eds.), *Excited States of Proteins and Nucleic Acids*, Plenum Press, New York, pp. 319–484.
5. D. W. Marquardt (1963) *J. Soc. Ind. Appl. Math.* **2**, 431–441.
6. C. O. Pabo and E. G. Suchanek (1986) *Biochemistry* **25**, 5987–5991.
7. P. H. Petra, P. C. Namkung, D. F. Seneear, D. A. McCrae, K. W. Rousslang, D. C. Teller, and J. B. A. Ross (1986) *J. Steroid. Biochem.* **25**, 191–200.
8. R. M. Purkey and W. C. Galley (1970) *Biochemistry* **9**, 3569–3575.
9. J. B. A. Ross, D. F. Seneear, E. Waxman, B. B. Kombo, E. Rusinova, Y. T. Huang, W. R. Laws, and C. A. Hasselbacher (1992) *Proc. Natl. Acad. Sci.* **89**, 12023–12027.
10. J. B. A. Ross, K. W. Rousslang, D. A. Deranleau, and A. L. Kwiram (1977) *Biochemistry* **16**, 876–883.
11. J. B. A. Ross, K. W. Rousslang, and A. L. Kwiram (1980) *Biochemistry* **16**, 5398–5402.
12. K. W. Rousslang, L. Allen, and J. B. A. Ross (1989) *Photochem. Photobiol.* **49**, 137–143.
13. K. W. Rousslang, J. B. A. Ross, D. A. Deranleau, and A. L. Kwiram (1978) *Biochemistry* **17**, 1087–1092.
14. D. F. Seneear, T. M. Laue, J. B. A. Ross, E. Waxman, S. Eaton, and E. Rusinova (1993) *Biochemistry* **32**, 6179–6189.
15. J. M. Vanderkooi and J. W. Berger (1989) *Biochim. Biophys. Acta* **976**, 1–27.