

Hidemi Iyota
Rumen Krastev
Hans-Joachim Müller

Thermodynamic studies on thin liquid films. III. Miscibility in adsorbed films at film interfaces

Published online: 23 September 2005
© Springer-Verlag 2005

The online version of the original article
can be found at <http://dx.doi.org/10.1007/s00396-004-1246-5>

**Colloid Polym Sci (2005)
283:975–981**

Unfortunately, the publisher printed
Figures 1–8 with errors. The correct
figures are given here.

H. Iyota (✉)
Department of Life and Environmental
Science, Kagoshima Prefectural College,
1-52-1, Shimoishiki, Kagoshima
890-0005, Japan
E-mail: iyota@k-kentan.ac.jp

R. Krastev · H.-J. Müller
Max-Planck-Institute of Colloids and
Interfaces, 14476 Golm, Germany

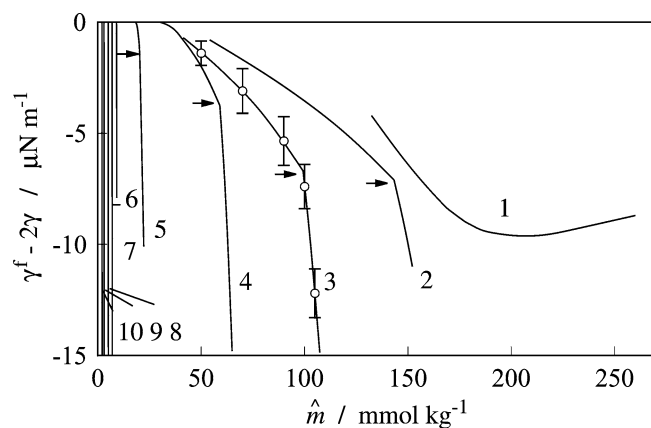


Fig. 1 Difference between film tension and surface tension versus total molality curves at a constant composition: (1) $\hat{X}_2 = 0.00772$, (2) 0.01379, (3) 0.01810, (4) 0.03015, (5) 0.09173, (6) 0.2150, (7) 0.2884, (8) 0.3817, (9) 0.4984, and (10) 0.7999

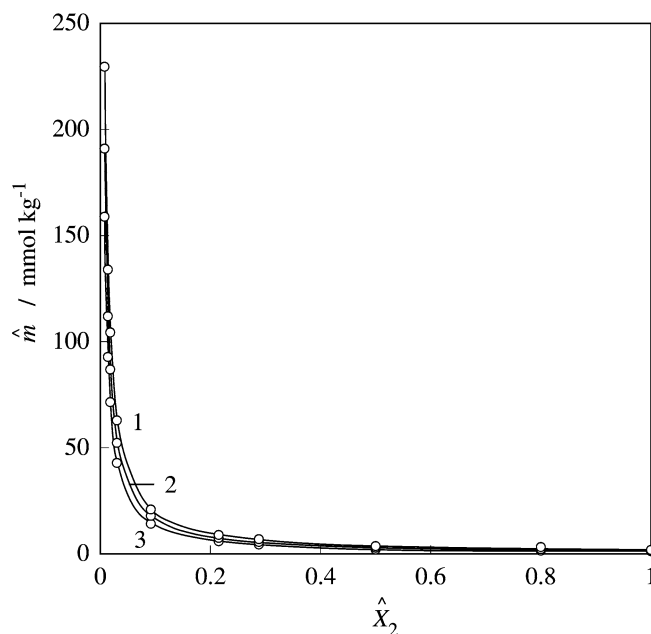


Fig. 2 Total molality versus composition curves at constant film tension: (1) $\gamma^f = 50 \text{ mN m}^{-1}$, (2) 55, (3) 60

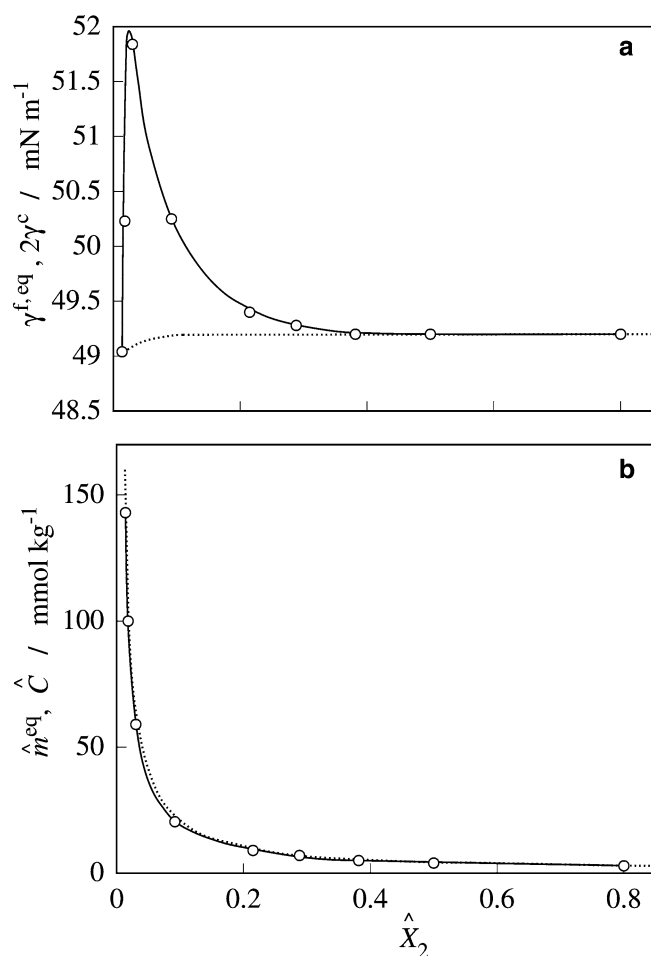


Fig. 3 **a** Film tension at phase transition versus and surface tension at CMC versus composition curves; (solid line) $\gamma^{f,eq}$ versus \hat{X}_2 , (dotted line) $2\gamma^c$ versus \hat{X}_2 ; **b** total molality at phase transition versus and CMC versus composition curves; (solid line) \hat{m}^{eq} versus \hat{X}_2 , (dotted line) \hat{C} versus \hat{X}_2

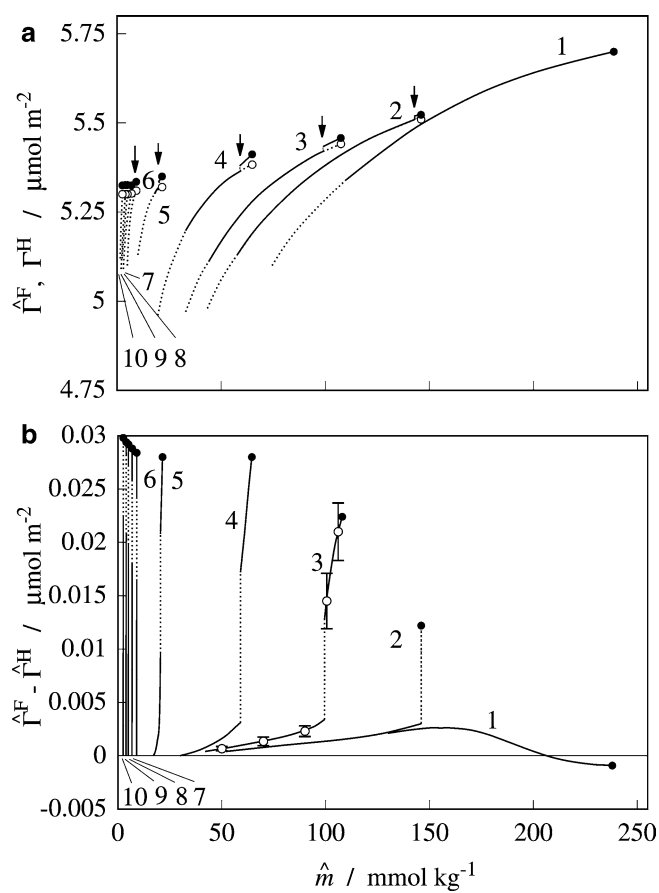


Fig. 4 **(a)** Total surface density versus total molality curves at constant composition; (solid lines) $\hat{\Gamma}^F$ versus \hat{m} , (dotted lines) $\hat{\Gamma}^H$ versus \hat{m} ; and (filled circle) $\hat{\Gamma}^F$ at the CMC, (open circle) $\hat{\Gamma}^H$ at the CMC; **(b)** difference in total surface density versus total molality curves at constant composition; (filled circle) $\hat{\Gamma}^F - \hat{\Gamma}^H$ at the CMC: (1) $\hat{X}_2 = 0.00772$, (2) 0.01379, (3) 0.01810, (4) 0.03015, (5) 0.09173, (6) 0.2150, (7) 0.2884, (8) 0.3817, (9) 0.4984, and (10) 0.7999

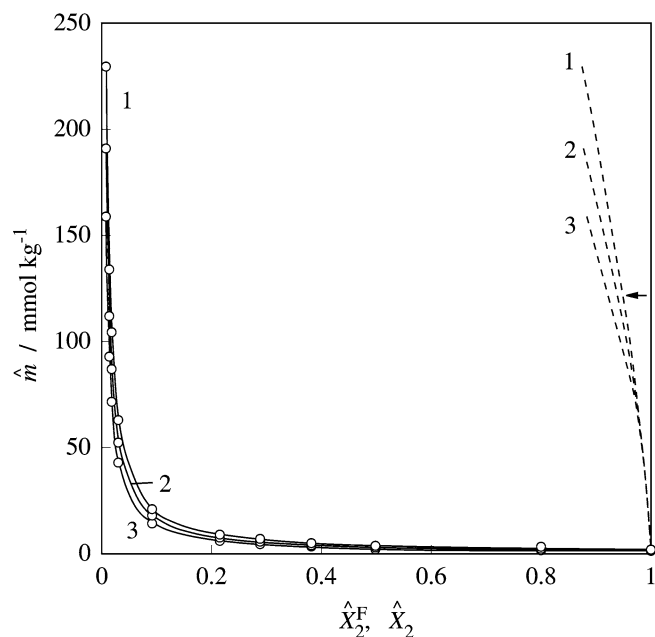


Fig. 5 Total molality versus composition curves at constant film tension: (1) $\gamma^f = 50 \text{ mN m}^{-1}$, (2) 55, (3) 60; (dotted lines) \hat{m} versus \hat{X}_2^F , (solid lines) \hat{m} versus \hat{X}_2

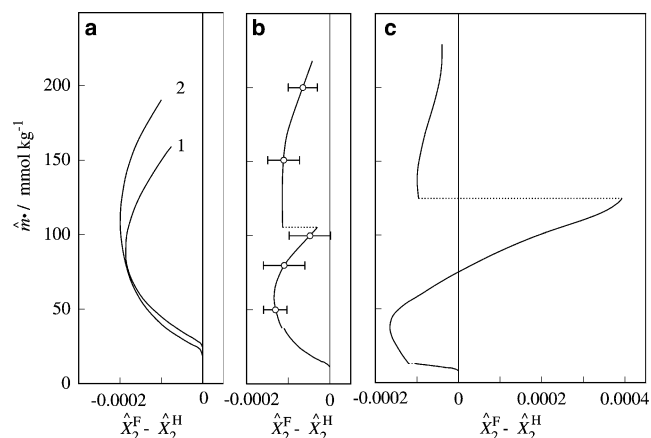


Fig. 6 Total molality versus composition difference curves at constant film tension: (a) (1) $\gamma^f = 60 \text{ mN m}^{-1}$, (2) 55; (b) 51.3; and (c) 50

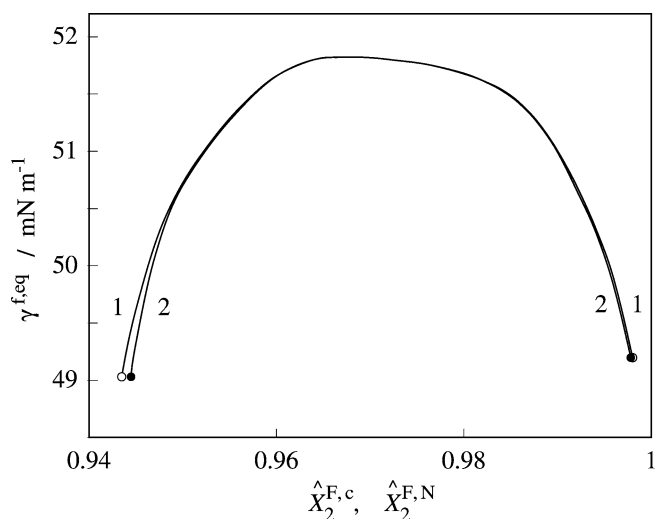


Fig. 7 Film tension at phase transition versus composition curves: (1) $\hat{X}_2^{F,c}$, (2) $\hat{X}_2^{F,N}$; and (open circle) $\hat{X}_2^{F,c}$ at the CMC, and (filled circle) $\hat{X}_2^{F,N}$ at the CMC

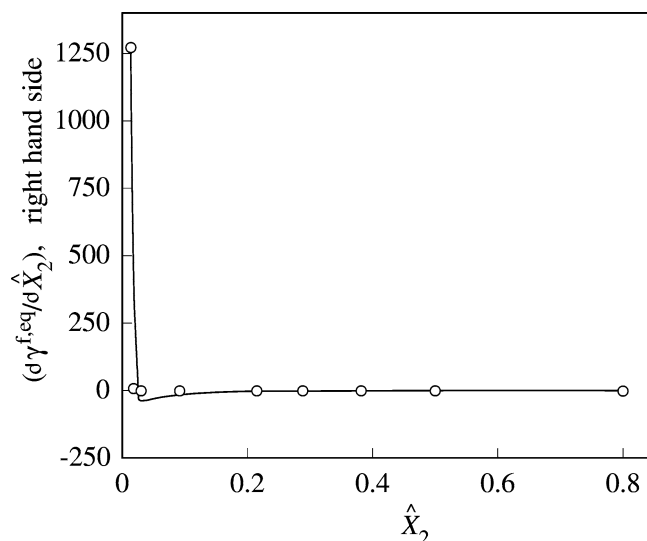


Fig. 8 Left- and right-hand sides of Eq. 45 versus composition curve: (solid lines) left-hand side, (open circle) right-hand side