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CORRECTION

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Correction: Physics of polymer gels: Toyoichi Tanaka and after

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The authors regret errors in the figure captions in this article; the correct figure captions are shown below.

Fig. 4 Comparison of (a) diffusion of ink dye molecules on a wet filter paper and (b) swelling of a piece of gel. **u**(**r**, t) is the displacement vector. (Modified from Fig. 21a and b of ref. 28 with permission. Copyright 1993 Springer.)

Fig. 5 Theoretical prediction of gel swelling kinetics (red-solid line, exact; blue-dashed line, predicted) and experimental results for acrylamide hydrogels with different final radii, $a \equiv a_\infty$. The definition of the symbols is shown on the right. The inset shows the experimental results on polyacrylamide hydrogels. (Replotted and modified from Fig. 4 and 6 in ref. 13 with permission. Copyright 1979 American Institute of Physics.)

Fig. 6 Phase diagrams of (a) polymer solutions and (b) polymer gels (neutral/noncharged), and optical photographs of cylindrical gels. (Modified from parts of Fig. 1 in ref. 49 with permission. Copyright 2005 Society of Polymer Science Japan.)

Fig. 7 Swelling/shrinking curves (T *vs.* d/d_0) (A), and SANS profiles for PNIPAM (homopolymer) gel (B) and P(NIPAM/AAc) (copolymer) gel (C). Homopolymer gels undergo a continuous VPT, while copolymer gels undergo a discrete VPT. SANS of the former shows critical divergence at $T_{\mathrm{PNIPAM}} \approx 32$ °C, while the latter shows a marked peak at $T > T_{\mathrm{PNIPAM}}$. The cartoons of square grids and circles show PNIPAM networks and ionized chain regions associated with AAc comonomers, respectively. The cartoons indicate that the size of the gel (grids) becomes smaller *via* hydrophobic contraction and the circles become larger *via* electrostatic repulsion, with changing T. (Modified from parts of Fig. 2 in ref. 49 with permission. Copyright 2005 Society of Polymer Science Japan.)

Fig. 8 Shrinking kinetics of PNIPAM gels with T-jumps to different temperatures, T_{d}.[58] (upper) $t_{1/2}$ (left) and d_{opaque} (right) *vs.* T_{d}. (lower) Optical photographs of the gel (a) in the initial state, and after T-jumping to (b) $T_{\mathrm{d}} = 45$ °C and (c) $T_{\mathrm{d}} = 55$ °C. (Modified from parts of Fig. 3 in ref. 49. Copyright 2005 Society of Polymer Science Japan.)

Fig. 9 (top) Gel inhomogeneity model for PNIPAM gels prepared at different temperatures T_{prep} and observed at $T_{\mathrm{obs}} = 20$ °C. (bottom) Linear swelling ratio d/d_0 *vs.* T_{prep} (left; filled circles) and light scattering intensity $\langle I \rangle_{\mathrm{E}}$ *vs.* T_{prep} (right; open circles).[60] (Modified from parts of Fig. 4 in ref. 49 with permission. Copyright 2005 Society of Polymer Science Japan.)

Fig. 11 Various types of inhomogeneities. (upper row) Schematics of concentration fluctuations: (left) polymer solutions and (right) polymer gels where frozen inhomogeneities (blue) are introduced by cross-linking, superimposed onto thermal fluctuations (red). (lower row; from left to right) (a) Spatial, (b) topological, (c) connectivity, and (d) mobility inhomogeneities. (Modified from Fig. 2 of ref. 71 with permission. Copyright 2002 Chemical Society of Japan.)

Fig. 12 SANS functions of a conventional PTHF gel and tetra-PEG gel. Solid lines are fitted with eqn (11) with/without a Gaussian component for the PTHF gel and tetra-PEG, respectively. The cartoons on the left schematically show the network structures. (Modified from Fig. 3 of ref. 66 with permission (Copyright 2012 Royal Society of Chemistry), from Fig. 2 of J. Bastide and L. Leibler, *Macromolecules*, 1988, **21**, 2647 with permission (Copyright 1988 American Chemical Society), and from Fig. 20 of ref. 48 with permission (Copyright 2011 Society of Polymer Science Japan.))

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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