Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supplementary Information

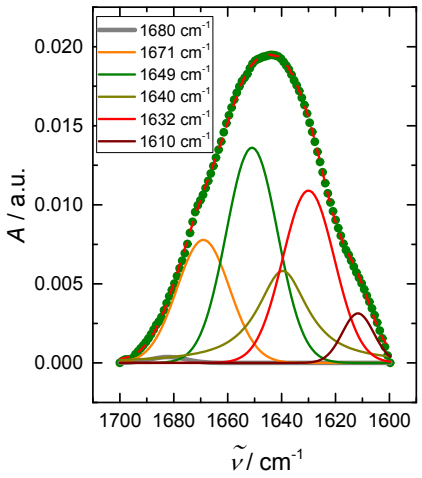

Figure SI 1: Amide I' band of horse liver alcohol dehydrogenase. Green circles are the experimental data and the dashed line the approximated spectrum. The colored lines indicate the underlying subbands which were used for the approximation

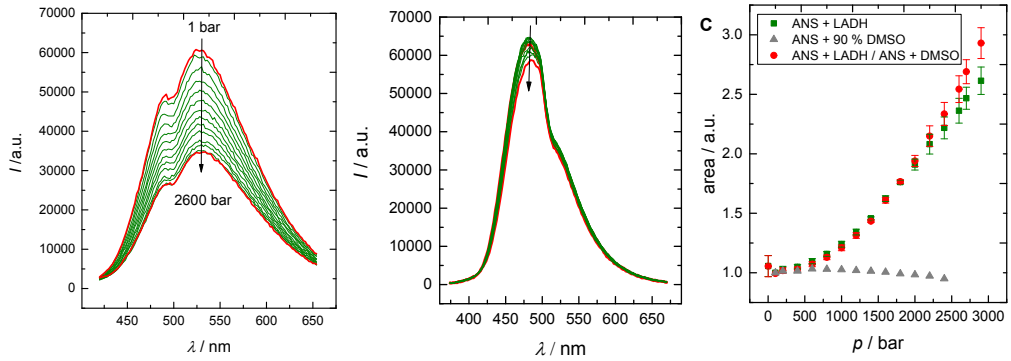

Figure SI 2: Fluorescence spectra of ANS in buffer solution (A), and in a 90% solution of DMSO in buffer (B), excited at 350 nm. Pressure dependent development of the area of the ANS spectra in 90% DMSO, as well as in the presence of LADH. Red circles represent the corrected data which were obtained by division by the intensity of ANS in DMSO at corresponding pressure (C).

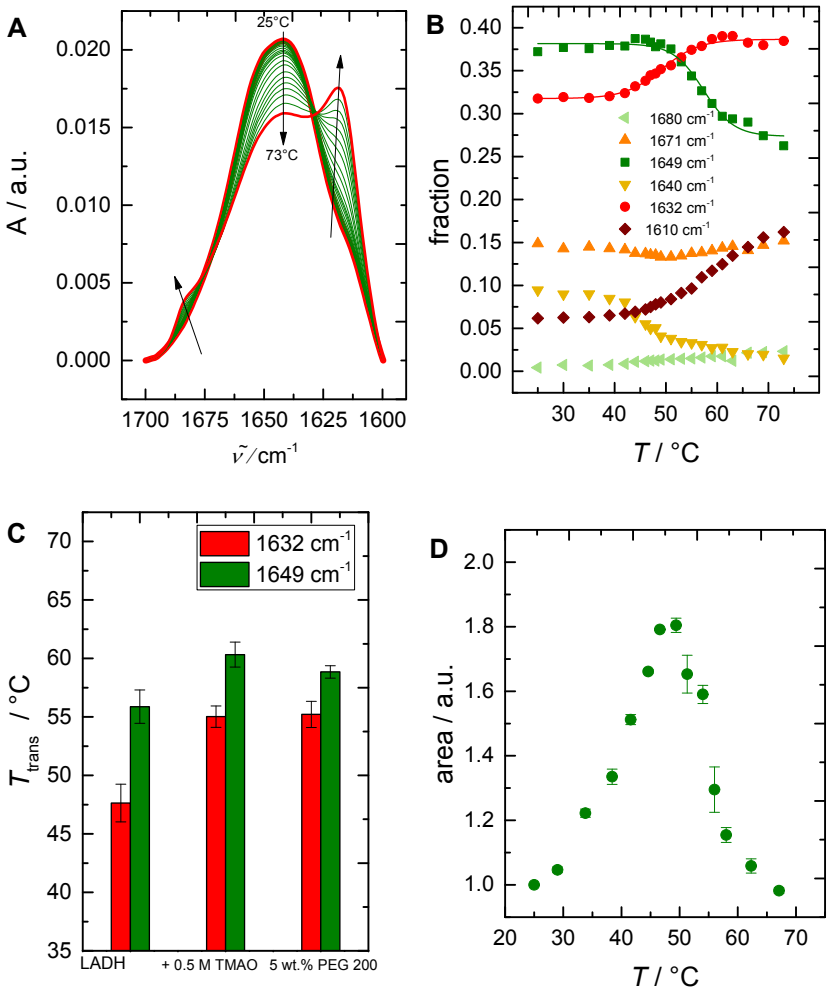

Figure SI 3: Temperature dependence of the area-normalized amide I' band of horse liver alcohol dehydrogenase (A). Temperature dependent changes of the area fraction of the underlying subbands. Solid lines represent fits according to Eq. 4 (B). Inflection points of the fits in the absence and presence of various cosolvents (C). Temperature dependent changes of the area of the ANS fluorescence band normalized to the area of the spectrum obtained at 25 °C.

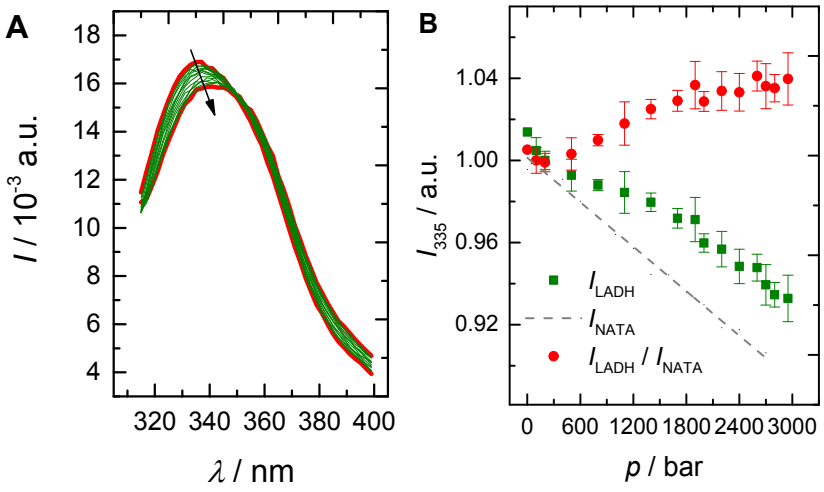

Figure SI 4. Pressure dependent changes of the area-normalized intrinsic tryptophan fluorescence of LADH at 25 °C excited at 295 nm. The arrow indicates increasing pressure (A). Pressure dependent change of the fluorescence intensity at 335 nm normalized to the spectra (B). Red circles show the data after correction of intrinsic pressure effects using the pressure dependent changes of the fluorescence of NATA (dashed line). The intensities were normalized to the 1 bar intensities to enable easy comparison.

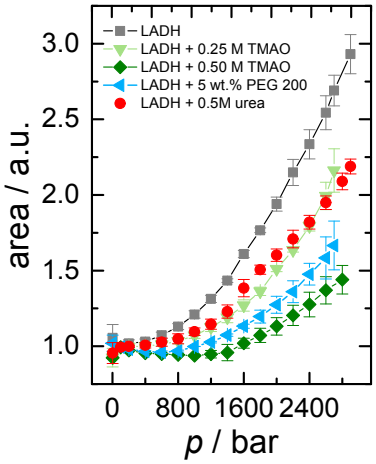

Figure SI 5. Pressure dependence of ANS fluorescence intensity (area of spectral band) in the absence and the presence of osmolytes and crowding agents.