

Abstract Submitted  
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**Bending of a surface with spontaneous curvature**  
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— We interest to curvature deformations that can be described by Hel-  
frich's energy: a quadratic mean curvature term, and a gaussian curva-  
ture term. When the surface is not strictly incompressible and presents  
a nonzero spontaneous mean curvature, we focus on simple cases to  
show that a priori determination of key features (spontaneous curva-  
ture, equilibrium area) may be biased according the expression taken  
for the energy.

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