Editorial

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The *Journal of Elasticity: The Physical and Mathematical Science of Solids*, founded under the title *Journal of Elasticity* in September, 1971, celebrates its 50th anniversary this year. One of its responsibilities as a leading research journal in the mechanics of solids is to publish review articles from time-to-time that have an emerging and lasting impact on world technology and that involve challenging physical and mathematical problems in areas of solid mechanics. The Review Article contained in this issue is dedicated to the area of deployable structures which fundamentally involves the deployment of folded configurations. A long list of example applications range from medical devices to transformable robotics, solar sails and space antenna, and the structural designs include rigid, rigid-flexible and totally flexible components. Physical and mathematical considerations include compatible folding, material behaviour, stability-instability issues, and many others. In addition, optimal packing and the design of either forced- or self-deployment schemes are of critical importance depending on the application.

The Review Article discusses a wide range of novel developments in the field that have presented physical and mathematical mechanics challenges, and it offers a prospective view regarding future expectations and needs for continued growth.

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