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## A PLETHORA OF NON-BENDING SURFACES OF REVOLUTION: CLASSIFICATIONS AND EXPLICIT PARAMETERIZATIONS

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**Abstract.** As the title itself suggests here we are presenting extremely reach two/three parametric families of non-bending rotational surfaces in the three dimensional Euclidean space and provide the necessary details about their natural classifications and explicit parameterizations. Following the changes of the relevant parameters it is possible to trace out the "evolution" of these surfaces and even visualize them through their topological transformations.

Many, and more deeper questions about their metrical properties, mechanical applications, etc. are left for future explorations.

MSC: 53A04, 53A05, 33E05

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