Researchers at the University of Texas at Arlington have developed micro-windmills that could be used to provide power for cell phones.

The micro-windmill is made of a flexible metal alloy that can withstand strong winds without fracturing. It is about 1.5mm at its widest point, meaning 10 could fit on a single grain of rice, and hundreds could be embedded in a cell phone case.

Wind energy created by waving the cell phone in the air or holding it up to an open window on a windy day would generate electricity to charge the cell phone’s battery.

According to a press release published by the university, the design blends “origami concepts into conventional wafer-scale semiconductor device layouts so complex 3-D moveable mechanical structures can be self-assembled from two-dimensional metal pieces utilizing planar multilayer electroplating techniques.”

A Taiwanese company, WinMEMS Technologies, has already begun work on potential applications of the technology.