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[\[LED\] NCKU Professors Develop LED Fishing Lamps](#)

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Taipei Times (2012/06/12) A university said on June 11 it had developed energy-saving LED fishing lamps that could cut costs for fishermen who use bright lights on their boats to attract fish.

“LED lamps can help reduce overall fuel consumption on fishing boats by between 15 and 20 percent,” National Cheng Kung University professor Sheng-chih SHEN (沈聖智), who helped develop the device, said at a press conference.

The LED lamps use less than 10 percent of the power required by traditional fishing lamps, allowing more energy to be diverted to freezers to ensure catches remain fresh, SHEN said.

SHEN and Ming-chung FANG (方銘川), both professors at the university’s Department of Systems and Naval Mechatronic Engineering, developed the lamp over a five year period with NT\$20 million (US\$669,000) in funding from the Council of Agriculture.

The lamp was also designed to project patterns of light on the surface of the ocean to attract fish, SHEN said, adding that the LED lamp is the first device in the world to be designed with this function.

SHEN said the lamp’s unique light patterns entice fish to remain longer in lit areas, adding that the LED lamp would dispel the myth that the brighter the light, the better the catch.

The professor added that the LED lamp is safer for fishermen, who are often exposed to hazardous ultraviolet rays emitted by traditional fishing lamps.

Over the past three years, the LED lamp has been used in test runs on a number of Taiwanese fishing vessels and test results have shown that fuel costs can be cut by about NT\$300,000 a year for offshore vessels and by more than NT\$2 million per four-month voyage for open-ocean vessels, SHEN said.

If all fishing vessels in the country used the LED lamp, fishermen could save a total of between NT\$600 million and NT\$700 million in fuel costs each year, the study found.

SHEN added that the LED lamp can easily be switched on and off, “unlike traditional lamps, which cannot be turned on for up to 20 minutes after being switched off.”

The results of the study have been given to two local manufacturers, and some Japanese companies have also expressed interest in the technology, as similar lamps in Japan may be 10 times more expensive, FANG said.

Reference:

[Taipei Times 2012/06/12](#)

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[National Science Council International Cooperation Sci-Tech Newsbrief](#)  
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