



PRESS RELEASE

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PolyU snatches six awards in the 6th International Exhibition of Inventions

The Hong Kong Polytechnic University (PolyU) has recently won six awards, including two Gold, two Silver and one Bronze Medal and a Special Prize in the 6th International Exhibition of Invention which was held in the city of Suzhou in China.

The winning entries presented by PolyU and their respective Principal Investigators are listed and briefly described as follows:

(1) Gold Medal and Special Prize: Eco-Block

Inventor: Prof. POON Chi-sun, Department of Civil and Structural Engineering

The development of Eco-block by Prof Poon Chi-sun, Director of the Research Centre for Environmental Technology and Management, can be dated back to 2002.

Currently more than 300 tonnes of glass wastes and thousands of tonnes of construction materials are being disposed in Hong Kong's landfill sites. To alleviate this problem, Prof. Poon and his team has been working since 2002 on the recycling of construction debris for the production of Eco-block. The new generation of Eco-block are made from recycled waste glass derived from beverage containers and construction and demolition waste. The production of Eco-blocks is expected to alleviate the waste disposal pressure and minimize environmental degradation due to extraction of natural materials such as sand and stones. More importantly, these Eco-blocks are proved to work in converting air pollutants into non-hazardous materials. Experiment results show that at least 20 per cent of nitrogen oxides can be effectively removed under laboratory conditions. The use of recycled waste glass in the blocks has, in particular, aided the air pollutant removal effect.

The use of Eco-blocks will become more popular in the territory as PolyU has recently received a generous donation of HK\$2 million from HSBC Insurance to kick off a related environmental education and improvement project. It is planned that premises of 10 non-profit making schools will be paved with these Eco-blocks in the next few years.



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新聞稿

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理大於第六屆中國國際發明展奪六獎

香港理工大學最近在蘇州舉行的第六屆中國國際發明展覽會中奪得六項獎項，包括兩項金獎、兩項銀獎、一項銅獎及一項特別獎。

在展覽中獲獎的理大發明及其首席研究員等資料簡述如下：

(一) 金獎及特別獎：環保再造磚

發明者：土木及結構工程學系潘智生教授

香港現時有超過三百噸玻璃廢料和建築物料棄置於堆填區，為紓緩問題，理大環境科技及管理研究中心總監潘智生教授及其研究小組早於二零零二年已著手研究以建築廢料循環再造，製成「環保再造磚」。新一代「環保再造磚」利用由飲料瓶子循環再用的玻璃廢料混合建築廢料製成，預期製造和使用環保磚可望紓緩本港堆填區的負荷，並可減輕由於開採沙石等天然物料而造成對環境的破壞。更重要的是，「環保再造磚」經證實能將空氣污染物轉變成無害物質；理大研究人員的測試結果顯示，在實驗室條件之下，百分之二十以上的氮氧化物能被有效地消除，而使用循環再造玻璃廢料，則特別有助於消除空氣污染物。

預期「環保再造磚」在港會日漸受到歡迎。理大近獲滙豐保險慷慨捐助二百萬元支持，展開一項環保教育及促進計劃，率先於未來數年間為十間非牟利學校鋪設「環保再造磚」。