

Helping to shape Singapore's coastline

Professor Tan Thiam Soon was conferred PEB's Distinguished Professional Engineer Award for his contributions to land reclamation research

By Sun Jiamin



One of Er Professor Tan Thiam Soon's key research resulted in the optimisation of unwanted soils generated from construction sites to be reused in land reclamation projects. PHOTO: LIANHE ZAOBAO

Singapore's skyline is defined by iconic buildings such as Marina Bay Sands, the Singapore Flyer, and Esplanade – Theatres on the Bay. These buildings, as well as many more across Singapore, sit on reclaimed land. And helping Singapore to – literally – alter its coastline to make constructing these buildings a reality, is Er Professor Tan Thiam Soon.

One of Er Prof Tan's key research contributions is the optimisation of unwanted soils generated from construction sites, so that it can be used in land reclamation projects. This innovative reuse-and-recycle process has turned millions of cubic metres of excavated soils from construction sites here, which were originally designated for disposal, into fill materials which can be used for Singapore's future land reclamation work.

Er Prof Tan's sustainability-driven solution is particularly useful in Singapore – which is land-scarce and where land reclamation materials are limited – and has helped reduce the amount of sand needed to be purchased from



Among his many awards, Er Professor Tan Thiam Soon received the Public Administrative Medal (Silver) in 2008 and the Public Administrative Medal (Gold) in 2017.

neighbouring countries. The scheme was successfully implemented in the Pulau Tekong land reclamation project in 2000.

The Institute Professor at the Singapore Institute of Technology has consulted for most of Singapore's major land reclamation projects over the last 30 years, including Punggol, Changi South Bay, Pulau Ubin and Pulau Tekong. His research, specialising in innovative land reclamation solutions, has also made important contributions to how these coastline-shaping projects have been carried out.

"Er Prof Tan's exemplary leadership and innovations in geotechnical engineering have led to strategic industry transformations, particularly in the area of land reclamation. He is truly a role model and inspiration to present and future engineers," says Er Chua Tong Seng, a PEB board member.



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