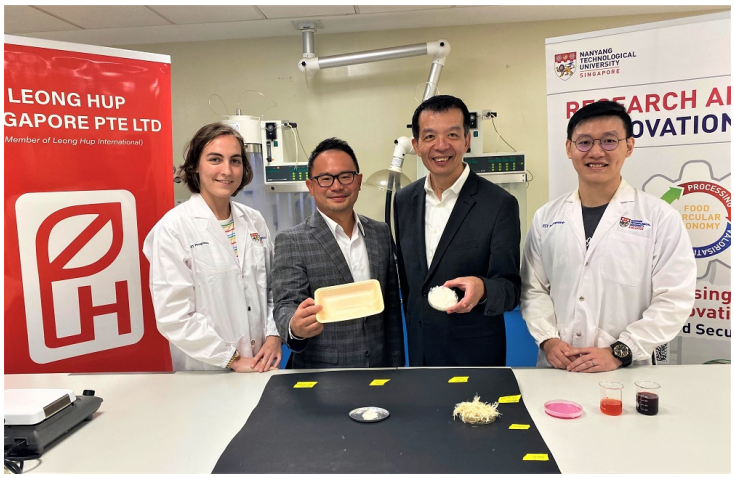
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Singapore creates first â??zero wasteâ?? poultry processing facility

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Innovations include egg trays made from feathers and repurposing nutrients inblood for media to cultivate cell-based meat



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Nanyang Technological University, Singapore (NTU Singapore) and poultry producer Leong Hup Singapore have jointly developed processes to repurpose waste materials from poultry farming.

One of the key innovations include using the keratin from chicken feathers as a material for egg trays, serving as a biodegradable replacement for synthetic polymers, whose production, use, and disposal causes greenhouse gas emissions, as they are made from petroleum oil.

The collaboration also resulted in another innovation â?? the successful conversion of biological waste from Leong Hup Singaporeâ??s poultry farming, such as blood and bones, into an alternative and cost-effective culture medium that could be used to cultivate cell-based meat.

Leong Hup is currently testing the innovations in its Singapore plant, and expects to implement the products it has developed with NTU in its overseas plants in Malaysia and Southeast Asia, by 2023.

Image credit- NTU Singapore