Headline	Honours for young scientists		
MediaTitle	The Star		
Date	15 Apr 2025	Color	Full Color
Section	Metro	Circulation	175,986
Page No	7	Readership	527,958
Language	English	ArticleSize	659 cm ²
Journalist	Jarod Lim	AdValue	RM 33,165
Frequency	Daily	PR Value	RM 99,495



Honours for young scientists

By JAROD LIM jarodlim@thestar.com.my

SOIL scientist Dr Jeyanny

Vijayanathan has achieved a sig-nificant milestone as the first in her field to win the Outstanding

Young Chemist Award (OYCA). The 43-year-old chemist from Forest Research Institute Malaysia (FRIM) was recognised in the industry category for her contribution to soil research and rehabilitation.

"I feel happy that my contribu-tion to soil science have been

recognised. "This award also highlights the importance of soil chemistry in

"Every day, we step on soil; we fail to realise that we only have one planet, so we must care for it. It takes 300 to 400 years to form just 1cm of soil," said

Jeyanny. Launched in 2021, OYCA is a flagship initiative by Malaysia Young Chemist Network under Malaysian Institute of Chemistry (IKM)

It provides a platform for young Malaysian chemists to advance in chemistry and pro-fessionalism. The award has two categories:

industry and academic.

The industry category consid-ers professional training, indus-trial innovation, leadership and entrepreneurship, while the aca-demic category evaluates research output, including publi-

research output, including publi-cations, grants, postgraduate supervision, awards and intellec-tual property. Jeyanny joined FRIM in 2005 and conducts soil chemistry analysis and research, while also analysing soil and plant tissue samples from private and govsamples from private and gov-ernment establishments for various applications in the FRIM Soil Chemistry Laboratory.

"For example, we study how soil enhances tree productivity Prestigious award highlights chemistry's diverse solutions



Industry winner Jeyanny advises young chemists to stay passionate and return to the fundamentals.

and examine the nutrient compounds that act as natural fertiliser.

"We also focus on conservation efforts, such as soil pollution remediation, reforestation, reha-bilitation of marginal soils and assess how much water can be stored in forests for the future,' she said.

Jeyanny credits her passion for chemistry to her teacher at SMK Sri Aman in Petaling Jaya,

Selangor. "Mrs Lim made chemistry classes enjoyable; our lab ses-sions were exciting and memora-ble," she said.

ble," she said. After joining FRIM and with a government scholarship, Jeyanny pursued a doctorate in soil science at Universiti Putra

Malaysia. This led to her research on plant nutrition deficiencies, pro-

ductivity and their role in timber production

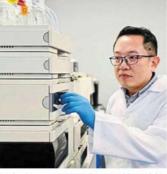
Another key study examined how mountainous forests con-tributed to carbon sequestration potential compared to lowlands. "This research assessed how much carbon is stored in the soil, which is important for climate change mitigation studies" she change mitigation studies," she said

said. Jeyanny also participated in a community project in Kampung Kuantan, Kuala Selangor, converting organic waste from rivers into biochar through pyrolysis.

(Biochar is a form of charcoal, sometimes modified, that is intended for organic use, as in soil.)

The project, which ended last year, not only reduced pollution but also improved soil quality and enhanced moisture reten tion for plant productivity. Moving forward, Jeyanny

plans to explore biochar's potential in mangrove reforestation



Academic category winner See is working with his team to detect microplastics in water, food and ryday environm

> and its role in soil remediation in various ecosystems. "My advice to young chemists

is to stay passionate and return to the fundamentals, just as our predecessors did. "Chemistry is everywhere in modelly lives and Lhope more

our daily lives, and I hope more young people pursue careers in this field," she said. Meanwhile, this year's OYCA

academic category award went to Dr See Hong Heng, associate professor at Universiti Teknologi Malaysia's Faculty of Science,

Chemistry Department. "It's both exciting and hum-bling to win. The award is recognition of the hard work, challenges and passion that have shaped my journey in chemistry. "I hope this inspires young sci-

entists to pursue their curiosity and make an impact," said the 44-year-old.

An analytical chemist by training, See's interest in chemistry

began with a curiosity about scibegan with a curiosity about sci-ence's role in everyday life. "This passion grew during my undergraduate years and led me to pursue a PhD in Analytical Chemistry. "I was fortunate to receive a Swiss National Science Foundation Eclewship which

Foundation Fellowship, which took me to the University of Basel, Switzerland.

"Later, I expanded my exper-tise at University of Tasmania,

Australia. "These experiences reinforced my decision to pursue chemistry as a career, recognising its potential for meaningful change.

See developed a key innova-tion: a solid-state electrophoresis technique redesigned as a portable, solvent-free diagnostic tool. This advancement could lead to faster and more convenient health monitoring, eliminating the need for complex laboratory

the need for complex laboratory equipment. "One of the toughest challeng-es was simplifying a complex lab technique into something porta-ble and practical. "But through persistence, crea-tive problem-solving and team-work, my team and I refined the design until we got it right," he said. said

See's team is also developing advanced methods to detect microplastics in water, food and

other everyday environments. Looking ahead, See aims to create simple, practical and eco-friendly "sample-in, answer-out" devices for healthcare, environmental monitoring and food

ronmental monitoring and food safety. OYCA applications for this year are open for IKM members aged 45 and below with at least five years of experience in chemistry or related fields.

Application deadline is July 31.