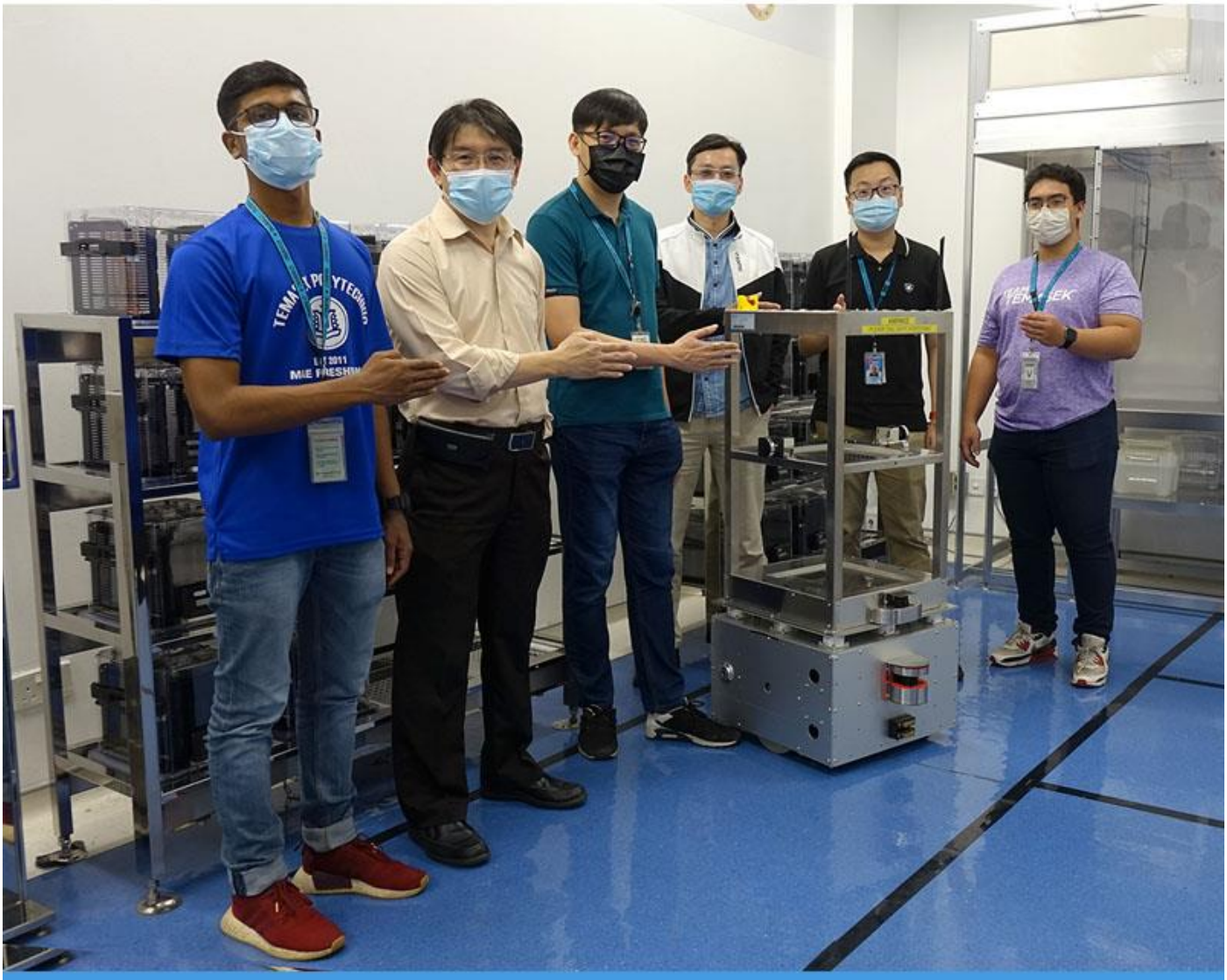
ssmc Monthly Newsletter FEB 2021

FAB NEWS



SSMC hosted Prof Wee and students from Temasek Polytechnic (TP) to witness our Automated Robot Transporter in action. This SSMC-TP collaboration project was co-created by a multidiscipline engineering team, giving our manufacturing line a productivity boost. L to R: Adith Prakash (Diploma in Mechatronics), Professor Wee Teck Chew,

WORKING TOGETHER

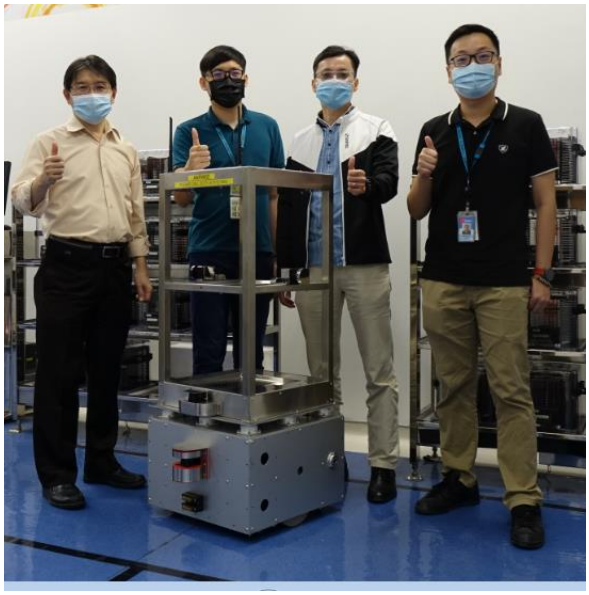
Driving Industry 4.0 with Multidisciplinary Collaboration

On 11 Jan 2021, SSMC hosted a visit for students and lecturer of Temasek Polytechnic (TP) and showcased our collaboration project, AMR (Automated Mobile Robot) transporter. In the visit, our team demonstrated the use of the transporter in production. Also an educational tour was conducted at the LEAN Centre, where the joint development work of the transporter was first conceived.

Dr. Wee Teck Chew, Head of Robotics and Automation Centre of TP commended how SSMC helps to bring education to life and life to education. “Through the partnership, our staff and students could apply and enhance their knowledge and skills, learn about the cutting-edge technologies in robotics, advanced manufacturing and see the robots that they developed to improve productivity on the SSMC production floor.”

Edward, our system & automation engineer and Xavier, senior engineer explained to TP students during the fab tour that the transporters help to boost productivity in our production. The self-navigated transporters help to carry an average of 70 wafer lots a day, transporting them across Wafer-Start area to Thin Film and Etch areas, hence offloading operator’s manual transportation duty.

One thing unique about collaboration is the convergence of multi-disciplines, including mechanical engineering for the robotic design of the transporter; software and IT that handle the alarm and navigation requirements and electrical engineering for the sensing, connectivity and battery charging capabilities. With strong partnership among SSMC, TP staff and its students, we overcame the challenges and successfully launched the transporters in 2020.



Ho Eng Keong highlighted, **"Together with TP, SSMC is proud to be first in the industry to co-create this robotic solutions, locally in Singapore. Although the development process took a long journey, the spirit of never-giving-up led us to a win-win situation. As we go from strength to strength, both SSMC and TP have sharpened the robotics skills and capabilities through this collaboration project. Our long term partnership positions us strategically in the Smart Manufacturing landscape."**

The future of engineering talent development in this megatrend of Industrial 4.0 is bright. Both Eng Keong and Dr. Wee concurred that the megatrend requires us to place strong focus in skills development, not only in technical and smart robotics capabilities, but also critical, creative thinking as well as being resilient and future-ready for the ever-changing engineering field.