Additive Manufacturing Featured in DOST Region VII's Technology Forum for the 2022 NSTW Celebration

by Kai H. Negado

Featuring state-of-the-art technologies, day two of the DOST Region VII 2022 National Science and Technology Week (NSTW) Celebration saw presentations from EPSON Philippines, Xeleqt Technologies Innovation Inc., and DOST-MIRDC's Additive Manufacturing Center (AMCen).



Engr. Joseph Alfred V. Garcia of the AMCen provided an explanation of how AMCen came about. starting with consultations with the different regions and various industry associations in 2016, and gathering information on

what the industry needs in terms of manufacturing. 3D printing or additive manufacturing machines at that time were still expensive, but the DOST-MIRDC wanted to address the identified gaps in manufacturing – thus, the AMCen was born.

Established as a collaborative research center and technology hub for additive manufacturing (AM), the center aims to contribute to increasing and sustaining the country's global competitiveness. Engr. Garcia highlighted the Center's plans to develop the next generation of manufacturing engineers that are capable of AM, for them to be 'industry-ready' – to be well-versed in AM technologies. He also emphasized during his presentation that AM will not replace conventional manufacturing processes, but rather complement them in terms of finding new ways in which to apply AM where conventional manufacturing processes cannot be used.

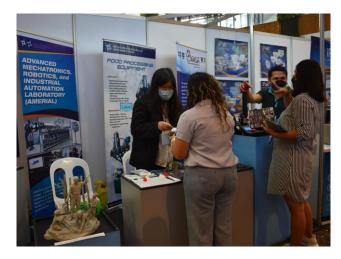


Engr. Garcia's presentation inspired queries from the audience, and from those who sought his advice for startups in the Central Visayas region on exploring AM technologies.

"Startups should take advantage of additive

manufacturing," Engr. Garcia said. This would mean less capital-intensive investment will be needed, startups will be able to market their products faster, and iterate their product anytime, enabling their products to develop and mature faster.

For the different sectors, Engr. Garcia reaffirmed that AM is there to complement current industry practices by addressing the limitations of conventional manufacturing processes. Citing examples such as light weighting features – lattices and topology optimized geometries – which are very difficult to machine, while showing one of the 3D printed metal samples which was on display at the DOST-MIRDC booth.



The AMCen presentation conducted by Engr. Garcia during the DOST Region VII 2022 NSTW celebration raised awareness and opened opportunities for possible future collaborations between the regional offices, academe, and industry with DOST-MIRDC's technologies, especially its AM services.