

## Message from the President

Post COVID-19 Pandemic requires a new wisdom. The universities and the industry must come up with new growth models to meet the new demands. The impacts on science, technology have been substantial and there will be uncertainty in the cascading implications in the future. But lessons learnt are a plenty. More training and research collaboration activities and scientific conferences may be held virtually, Virtual conferences allow for larger and more diverse audiences than in-person meetings, and reduce transaction costs in travelling. They could also facilitate more customised training by pooling expertise across institutions and enabling students to participate remotely in training offered by partner institutions. However, there are drawbacks to these applications. Virtual environments are not perfect substitutes for face-to-face interactions, as it is harder to build trust for future research collaborations. Digital security and privacy will be critical. There will be an increase in the automation. More will adopt the Internet of Things (IoT) and blockchain technologies.

There are also likely changes in STEM education. It will move to a blended approach, moving away from a model based on a lecture. Students already have access to vast amounts of information and they are learning in different ways. In the future, a lot of learning that could happen in a traditional lecture will happen outside the lecture halls. They will engage with the teaching staff in different ways in order to learn to solve problems. There is a need and develop a critical view of scientific learning, combining pedagogy and technology. We need to make sure that STEM is accessible to all people from all walks of life from all different backgrounds. To be successful here, we need to start our efforts at a very early age. We need to do a better job connecting with our high schools, for instance, to help students develop a science identity at a very early age and combat misconceptions and misinformation about science. We need to move towards cross-disciplinary training in science education. There is a great deal of work that we need to do in this direction

Finally, we need to have a resilient society. A society that can deal with present and future challenges by developing solutions that transforms a system to a new state not just reacting to crisis and disruption by bringing it back into balance. The society needs to be more resilient to cope, adapt and transform. Adaptation differs with coping. It involves planning rather than reactive. In order to adapt, the scientific community must focus on long term sustaining practices and results. COSTAM should lead the way.



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