

Editorial

MESSAGE FROM THE HONORARY EDITOR

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The increased compartmentalization and the resulting specialization of knowledge that was the strong trend of the past century is clearly undergoing subtle changes. The private sector now recognizes that its success depends upon the educational institutions providing an abundance of well-educated and trained graduates and intellectual property to fuel the world's knowledge-based economy. The temples of learning are beginning to understand that the new socio-economic dynamics are to be taken into account to balance in their mission and courageously lead to shoulder the multiple responsibilities. This fundamental shift in society that has altered the world's socio-economic ethos and the higher education's relationship to it has been influencing the educational institutions, which are the creations of society. The most exciting research is happening at the boundaries where two or more disciplines overlap. Nanoscience and engineering knowledge is exploding, leading to fundamental scientific breakthroughs and technological paradigm changes in the ways materials, devices, and systems are understood and created. Potential breakthroughs include emergence of entirely new phenomena in physics and chemistry; nanofabrication of three-dimensional molecular architectures; achievement of orders of magnitude increases in computer

efficiency; utilizing of novel data processing architectures such as quantum computing and cellular automata; repair of human tissues with tissue replacements and realization of a continuous presence in space. Thus, it is clear that the trans-disciplinary research activity is the vision of the present century.

The development of information technology has been creating dramatic changes in electronic communication, and this change has also been providing an environment for the scientific journals to look for electronic publication. Some experts and publishers believe that in about ten years every scientific journal would be of electronic publication. Of course, there are several advantages in electronic publication of journals, which are obvious in view of economic changes.

It is with this spirit, the present electronic Journal of Mathematical and Physical Sciences (EJMPS) is started as a trans-disciplinary electronic journal and the editors are pleased to introduce the first issue of EJMPS. We do hope that this journal will become the forerunner for the trans-disciplinary electronic journals that might follow soon.