EDITORIAL

Congratulations to Einstein. After one century his theoretical prediction of gravitational waves is experimentally verified in the month of February, 2016. That is the beauty of scientific research; sooner or later, the truth has to triumph. In this context, the role of publishing significant researches is so very important. Coming back to gravitational waves, behind this phenomenal success story, there have been not only meticulous theoretical investigations but also extremely sophisticated experimental arrangements to measure such a wave. Gravitational waves at their origins can be extremely large and violent, but by the time the waves reach the Earth it becomes millions of times smaller. Such unthinkably small measurements were done by these instruments. Theory and experiments are thus so much complimentary to each other.

In the current issue of JAFS, both purely experimental and fundamental theoretical papers have found their places. Also, the published articles are practically from all the major disciplines of Science, viz., Physics, Chemistry, Mathematics and Biosciences. Some of the articles even bring different opinions on the validity of existing understandings of different phenomena.

In this context, one of the papers claims to discover intrinsic problems of microscopic theories of superfluidity/superconductivity developed by using single particle basis with plane wave representation of particles. According to the author such theories are found to be inconsistent with certain physical realities attained by the system in its low energy states and they cannot reveal complete and clear understanding of the said phenomenon with experimentally matching results.

Samrat Dey