

EDITORIAL

This is the fifth issue of Journal of Nepal Physical Society (JNPS). Physics is a quantitative science. Physicists deal in numbers which is different from the mathematician's number. Physicist's numbers are generally measurements. Measurement is very important in physics and hence physicists are always serious about measurement. Physicists have developed many measuring devices and techniques, which have wide applications in different fields in society. With advancement in technologies in a last few decades, the levels of precision in physical measurements have increased dramatically. Modern technology is largely dependent on precise, accurate, convenient measurements in design, construction and communication whereas modern measurements depend on quantum standards of wavelength, frequency, voltage, current etc. Uses of the advanced techniques in the very precise measurements have crucial applications in many fields like the study of the structure of matter, launching of satellites in the respective orbits, from geophysics and astronomy etc.

On the cover page of this issue, we have managed to keep the image of Mt. Everest (Sagarmatha) with a measuring tape hanged from the peak. Mt. Everest is the highest peak from the sea level, which is situated in Nepal and hence is one of the prides for Nepal. In 1874 AD, the Great Trigonometric Survey (GTS) of Survey of India (SOI) declared height of Mt. Everest 8,778 m and as the highest peak of the world. In 1849/50 AD, SOI re-measured the height of Mt. Everest from Nepal side as 8,840 m. In 1954 AD, B. L. Gulatee from SOI re-measured the height as 8,848 m, which is the authentic height adopted by Government of Nepal till date. In between 1954 AD and 2005 AD many experts from different survey departments re-measured the peak heights. In 2005 AD, Chinese State Bureau of Surveying and Mapping (SBSM) again re-measured the peak height and declared 8,844.43 m as the

Everest rock-height. After the devastating earthquake of April 25, 2015, a debate started that the peak height of the Mt. Everest has been changed. In response to the debate, in 2017 AD, Government of Nepal launched "Sagarmatha Height Measurement Project", which got major responsibility of measuring the actual height of Mt. Everest after the 2015 Earthquake. Latest techniques comprising Levelling Survey, Trigonometrical Survey, Gravity Survey, GPS Survey have been used to collect the data. This important measurement has been made possible by the help of huge survey team comprising more than 80 people, who have already obtained data by mid of this year and data are in evaluation stage. Very soon we will get the revised height of the Mt. Everest after the 2015 Earthquake.

The main objective of the JNPS is to highlight the recent findings in the field of Physics within and outside of country. JNPS welcomes original relevant manuscripts from different areas of research in physics. This is one of the platforms, where physicists can share ideas and results related to physics for the benefit of human kinds and nature. We encourage everyone to support in our endeavor to build and share the knowledge from the research activities in physics.

At end, on behalf of the Editorial team and executive committee of Nepal Physical Society (NPS), I would like to thank all the contributors, reviewers, sponsors to make this issue successful. This society also thanks to all the NPS members, supporters and promoters for their valued supports to make all the NPS events successful. Editorial team feels free to receive any comment, query, suggestion, and correspondence for the improvement of JNPS.

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Chief Editor, NPS