

Musical Instrumentation

Scientific Studies of Musical Instruments may be an interesting area of study and research, and a proposal for a center devoted to such activities may be a proposition worth thoughtful considerations. The objective of the center may be:

1. Linking science and music
2. Scientific study of the architecture of musical instruments.
3. Logical and scientific interpretations of the characteristics of musical instruments
4. A center that may suggest on adaptations of appropriate technology, materials and current tools for better manufacturing and standardization of productions as its research outcomes.
5. Designing methodologies for instruments repairs.
6. Renovations for betterment of the instrument leading to higher musical effectiveness producing ability in the instrument.

Whether a musical instrument is good or poor is a question for musicians rather the scientists. What scientists can do is to:

- make precise objective measurements of the relevant properties of instruments
- describe the difference between instruments which musicians judge good or poor
- explain the above

The process aided by the principles of physics and engineering in collaboration with the sensitive instrumentalists can guide manufactures in reproducing features of good instruments more easily and cheaply and sometimes leads to improvements.

Even the most primitive musical instruments were built with the consideration of available materials and the manufacturing limitations were the result of the design process. In this center the scholars may study the physics behind the sound generation mechanisms of various instruments as well the effects of different materials and manufacturing processes on the sound of an instrument.

Experts for the center and other required basic facilities

Apart from instituting elaborate laboratory facilities, this center will employ experts in Musical Acoustics and Musical Instrument Engineering. The musicians with the finest musical ears [*will be inducted from the available musicians from the Department of Instrumental Music, RBU*] and the team require to work jointly for meaningful output with the help of the registered scholars who might be interested to join and learn such an interesting area of study.