

Foreword and Editorial

International Journal of Energy Technology and Management

We are very happy to publish this issue of an International Journal of Energy Technology and Management by Global Vision School Publication.

This issue contains 2 articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

In the research "Discussion of Current Support Policies of Performance Improvements in Existing Buildings by Nation and Comparison of Characteristics of Performance Evaluation Tools", a number of nations support policies and financial assistance to promote energy performance improvement projects in existing buildings. Accordingly, related market sizes have increased steadily. It is necessary for successful projects of performance improvement to review the correlation between energy characteristics of existing buildings and systems. The correlation would be evaluated by utilizing energy analysis tools and selecting optimal element technologies to reduce energy usage in the target buildings. However, no guidelines are provided for quantitative analysis features about energy analysis tools of existing buildings. Thus, it is difficult to select a proper analysis tool in the energy performance improvement projects. In this regard, this study selected quasi-steady and dynamic analysis tools, which were utilized in existing building energy performance improvement projects in Korea, and compared and analyzed the tools. The comparative analysis results showed that the differences occurred due to differences in application methods of weather data, thermal transmittance, thermal bridge, and infiltration rate. Other factors contributing to the differences were differences in input methods of internal heat gains from lighting, the human body, and equipment.

In the paper "Effects of second heat treatment on softening of a Pd-Au-Ag metal-ceramic alloys during simulated porcelain firing", in this study, Pd-Au-Ag based dental metal-ceramic alloys were degassed after casting and then subjected second heat treatment in the dental porcelain furnace. In the final stage of the process, the alloys were then subjected to simulated porcelain firing. The effect that second heat treatment has on the level of hardness maintained during simulated firing were investigated and the following results were produced. The hardness value of the alloy specimen that was second heat-treated after degassing was similar to that of the alloy that had not received second heat treatment showing that the second heat treatment alone did not cause any increase in hardness. In the initial simulated porcelain firing step, it was confirmed that the second heat treatment did not affect any significant change in hardness. However, In a later step of the simulated porcelain firing process the second heat treatment was found to have a positive effect on the alloy hardness.

International Journal of Energy Technology and Management
Vol. 2, No. 1 (2018)

June 2018

**Editor-in-chief of the June Issue on
International Journal of Energy Technology and Management**