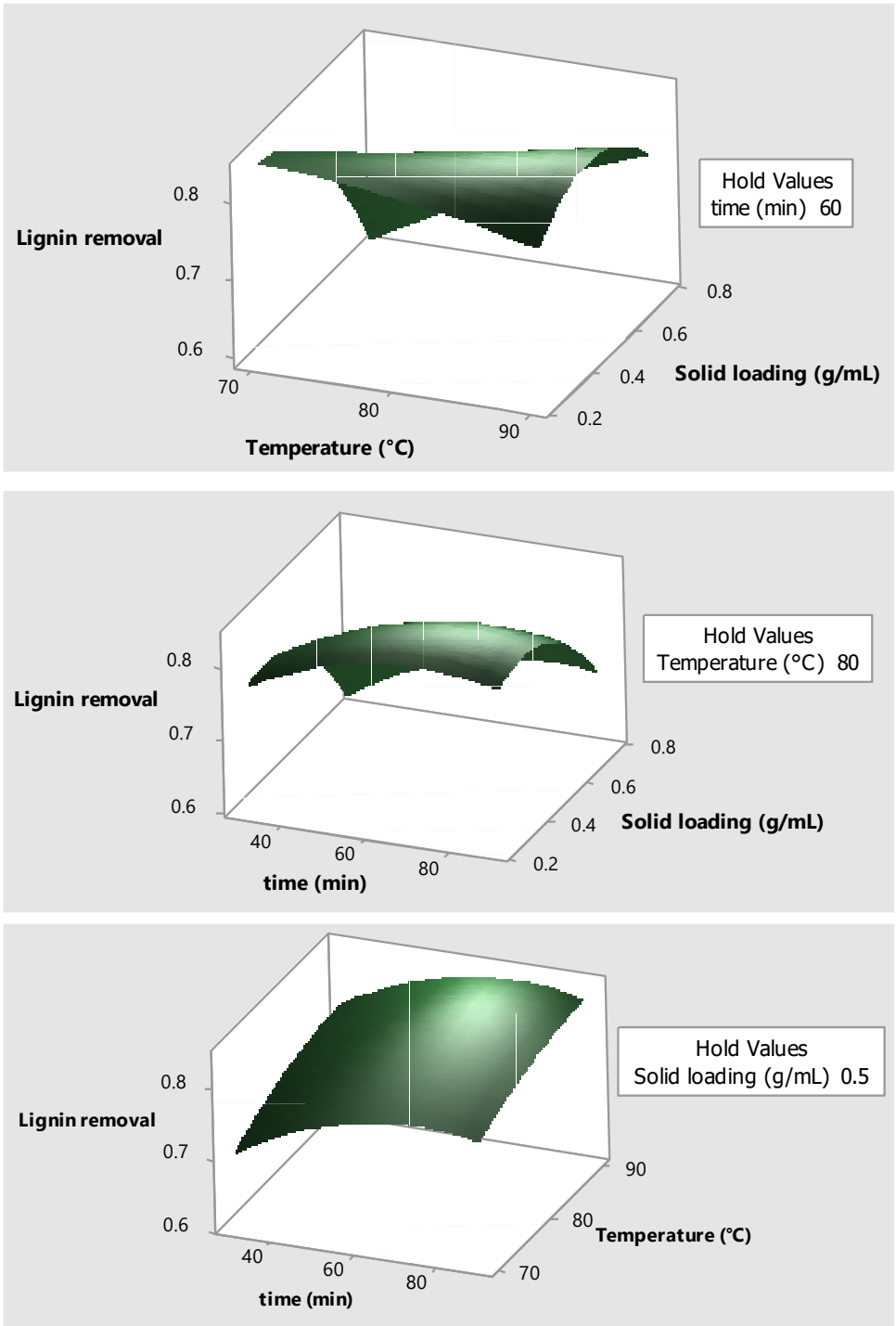

Figure 6: Surface plots of the lignin removal (Eq. 2) vs. the three factors considered

5. Conclusions

The effect of low-temperature acid-oxidative digestion on the delignification of urban forest leaf waste typical of parks and streets of Buenos Aires city was investigated. It was formed by swept *Platanus acerifolia* leaves and stemmed since it is widely planted in major cities. The experimental design was used to interpret the parametric interaction among the examined factors (time, temperature, and solid loading). Box and Behnken design of experiments successfully provided an acceptable surface model that could predict the behavior of further experiments, even outside the initial parameter range. The degree of delignification had a significant negative influence on the solid loading. Within the examined