

CHAPTER 9

SUGGESTION

This study has shown that in order to have the correct explanation of the effects on rheological and casting properties by TC and OC in conventional concept is not enough. In addition the quantitative and qualitative analysis of humic acid need to be done. We have succeeded in looking for methods to evaluate humic acid by extraction, following by gross chemical fractionation of organic matter and by NMR identification. The following are suggestions for further study.

1. We should do quantitative analysis of organic structure of humic acid, even β -humus if possible by NMR and FTIR.
2. Set the research to identify the suitable structure of humic acid, which required by the casting slip.
3. To improve Thai ball clays, we suggest finding the source of humic acid, which may come from commercial humic acid or humic soil extraction and then add them to upgrade rheological and casting properties.
4. For the humic acid structure, HVC humic acid can cause high casting rate so we should find the humic acid from humic soil extraction which has the same structure of HVC's and study about rheology and casting properties.
5. For soluble salts we should simplify the method to analysis them, even for cations such as Na, K and Ca in routine check, in addition to the soluble sulfate.
6. The study on NO_3 effects on rheological and casting properties is required in order to find the relation of chelating agent and CEC.
7. The effects of these humic acids should be studied through the end process of slip casting by using it in ball slip for casting slip