holocellulose to >70% and make the holocellulose amenable to enzymatic reaction.

3. The process as claimed in claim 1, wherein the said enzyme is selected from the group consisting of cellulases, peptidases, lipases, ligninases, feruloyl esterases and additional ancillary enzymes, most preferably cellulases.
4. The process as claimed in claim 1, wherein the said enzyme solution is prepared in reactor vessel at a protein loading of from about 2 mg/g to about 95mg/g of biomass, most preferably 4.625 to 46.25mg/g of biomass.
5. The process as claimed in claim 1, wherein the said biomass is loaded initially into the reactor vessel as mixable slurry having concentration in the range of 1 to 10% (w/v).
6. The process as claimed in claim 1, wherein the remaining biomass is added steadily in two, three, four, five, six, seven, nine, ten and twelve feed portions within 0.5 to 1.5 hrs to increase the solid loading in the final reaction mixture to 30% (w/v).
7. The process as claimed in claim 1, wherein the biomass is added steadily in three to nine feed portions within 0.5 to 1.0 hrs to increase the solid loading in the final reaction mixture to at least 15% (w/v).
8. The process as claimed in claim 1, wherein the concentration of soluble sugars in the biomass hydrolysate is at least 75 g/L of total soluble high concentration sugars.
9. The process as claimed in claim 1, wherein said biomass is converted into soluble sugars in 0.5 to 2 hrs.
10. The process as claimed in claim 1, wherein the said soluble sugars comprises polysaccharides and monosaccharides, most preferably glucose.
11. The process as claimed in claim 1, wherein the highest final glucose concentration in soluble sugars is between 50 to 150 g/L.