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Waste of palm fronds

Physical treatment

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Mathematical model

$$ C\_{HM\_{1}}=-\left[ K\_{ads,1}^{+} C\_{T }K\_{srp}^{\*}- C\_{T}K\_{ads,1}^{-} \right]t+C\_{HMi}$$

Mechanical treatment

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$$ r\_{d}= K\_{Srp,1}^{+}[ C\_{HM\_{1}.Sr}- \frac{P\_{A\_{1}}C\_{V}}{K\_{Srp}^{\*}} ]$$

$$ r\_{ad}= K\_{ads,1}^{+} [ P\_{HM\_{1} }C\_{V}- \frac{C\_{HM\_{1}.Sr}}{K\_{ads}^{\*}} ]$$

Chemical treatment

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Multi fixed bed

**Figure** 1 Shows the illustrate of waste water treatment using palm fronds**.**