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Pressure dependent wall slip of wood flour filled polymer melts

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Highlights

- Mooney procedure cannot be applied properly to natural fiber filled polymer melts because of nonperfect linearity in the experimental data points.
- Non-linearity of pressure vs. axial position plots can be explained on the basis of pressure dependent wall slip.
- Using a pressure dependent slip model it is possible to approximate the experimental data in a satisfactory way.
- Rheological characterization of natural fiber filled polymers is very challenging due to ineffectiveness of off-line methods and limited gap size choice for in-line methods.

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