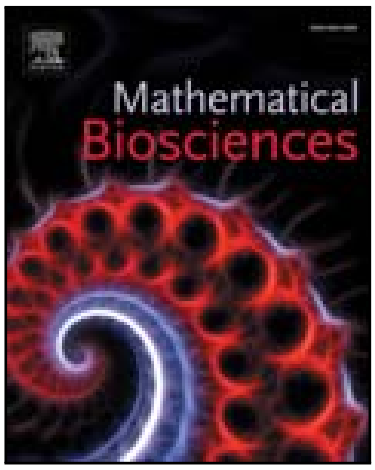


# INTERACTION OF GLIDING MOTION OF BACTERIA WITH RHEOLOGICAL PROPERTIES OF THE SLIME

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# Highlights

- Hydrodynamics of gliding bacteria is studied based the constitutive equations of FENE-P, SPTT and Rabinowitsch models.
- The governing equation of the motion of all the three models is characterized by a single rheological parameter.
- The impact of important rheological parameter on gliding speed is reported.
- The predictions of the gliding speed based on Rabinowitsch model are in good agreement with the experimental results.