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Simulation of Remove the Fouling on the in vivo By Using MHD

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Abstract : When a blood vessel is injured, the cells of your blood bond together to form a blood clot. The blood clot helps you stop bleeding. Blood clots are made of a combination of blood cells, platelets(small sticky cells that speed up the clot-making process), and fibrin (protein that forms a thread-like mesh to trap cells). Doctors call this kind of blood clot a “thrombus.”We study the effects of different parameters on the deposition of Nanoparticles on the surface of a bump in the blood vessels by the magnetic field. The Maxwell and the flow equations are solved for this purpose. It is assumed that the blood is non-Newtonian and the number of particles has been considered enough to rely on the results statistically. Using MHD and its property it is possible to control the flow velocity, remove the fouling on the walls and return the system to its original form.

Keywords : MHD, fouling, in-vivo, blood clots, simulation
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