Effect of Stent Geometries in diseased coronary artery. Unsteady flow dynamic simulations.

A. Goals:

• To implement various types of stent geometries in stenotic artery to numerically simulate the effects of stent in flow dynamics

B. Brief Description:

 Various Stents are modeled using SolidWorks and then placed in stenotic artery in order to numerically simulate the effects of stent to flow dynamic parameters such as wall shear stress, pressure, velocity, and turbulence.

C. Heights of Achievements this semester (using bullets):

- Construction of stent solid model was achieved.
- Implementation of stent solid models into coronary artery was achieved.



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Representative Figures/Diagrams/Videos that highlight your research methodology and results



Diamond-Shaped Stent Solid Model

SIV

