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Organophosphorus insecticides (OP) are one of the most widely used and important insecticide classes. After entering the mammalian blood stream, the OP will pass into the liver and from the portal vein to the central vein via sinusoids. While passing through the sinusoids some amount of the OP will enter the cell lining of the sinusoid and undergo desulfuration. It is this passage and the attendant desulfuration process that we intend to model. We have previously discussed this model we developed some years ago, a set of nonlinear partial and ordinary differential equations. While we had pleasing numerical results, some mathematical questions were left unresolved. It is our hope that we will have them resolved before the slides for this talk are typed. This work has been supported NIH grant DHHS/NIH 5 P20 RR17661-02 (Received September 13, 2010)