In this talk we consider the initial boundary value problem of the Korteweg-de Vries equation posed on a finite interval

\[ u_t + u_x + u_{xxx} + uu_x = 0, \quad u(x,0) = \phi(x), \quad 0 < x < L, \ t > 0 \]  

subject to the nonhomogeneous boundary conditions,

\[ B_1 u = h_1(t), \quad B_2 u = h_2(t), \quad B_3 u = h_3(t) \quad t > 0 \]  

where

\[ B_i u = \sum_{j=0}^{2} (a_{ij} \partial_x^j u(0,t) + b_{ij} \partial_x^j u(L,t)), \quad i = 1, 2, 3, \]

and \( a_{ij}, \ b_{ij} \ (j, i = 0, 1, 2, 3) \) are real constants. Under some general assumptions imposed on the coefficients \( a_{ij}, \ b_{ij}, \ j, i = 0, 1, 2, 3, \) the IBVPs (1)-(2) is shown to be locally well-posed in the space \( H^s(0,L) \) for any \( s \geq 0 \) with \( \phi \in H^s(0,L) \) and boundary values \( h_j, j = 1, 2, 3 \) belonging to some appropriate spaces with optimal regularity. This a joint work with R. A. Capistrano-Filho of Universidade Federal de Pernambuco and Shuming Sun of Virginia Tech.