1052-76-159 **Jeongwhan Choi*** (jchoi@korea.ac.kr), Sungbukgu Anamdong 5-1, Korea University, Department of Mathematics, Seoul, 136-701, South Korea, and **Shu-Ming Sun**, **Sung-Im Whang**, **Dal-Soo Lee** and **Sang-Ho Oh**. *Supercritical surface gravity waves generated by a positive forcing-theory and experiments.*

Forced surface waves on an incompressible, inviscid fluid in a two-dimensional channel with a small bump are studied. Near a nondimensional wave speed, called Foude number, a time-dependent force KdV equation (FKDV) is derived. The solutions of FKdV are studied both theoritically and numerically. Moreover, experiments are carried on corresponding to numerical solutions of FKdV. (Received August 26, 2009)