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Zephyrinus C Okonkwo* (zokonkwo@asurams.edu), Albany, GA 31705, and **James C Turner Jr.**, Tallahassee, FL 32306. *Existence of Neutral Stochastic Functional Differential Equations with Abstract Volterra Operators*. Preliminary report.

This paper deals with the existence of the solution process of neutral stochastic functional differential equation of the form

$$d[(Vx)(t, \omega)] = (Vx)(t, \omega)dt + \sigma(t, x(t, \omega))dz(t, \omega) \quad (1)$$

with the initial condition

$$x(0, \omega) = x^0 \in \mathbb{R}^n \quad (2)$$

where V and U are abstract Volterra operators acting on certain function spaces and $z(t, \omega)$ is a normalized \mathbb{R}^q valued Wiener process. Several existence results are proven. (Received October 03, 2000)