1078-47-12 **H. R. Cho*** (chohr@pusan.ac.kr), Department of Mathematics, Pusan National University, Pusa 609-735, South Korea, Busan, Busan 609-735, South Korea, and **B. R. Choe** and **H. Koo**.
Fock-Sobolev spaces of fractional order.

We consider the Fock-Sobolev space F^p_s of fractional order consisting of entire functions f in $\mathbb{C}^n$ such that $\mathcal{R}^{s/2}f$, the radial derivative of f of fractional order $s/2$, is in the Fock space F^p. We show that an entire function f is in F^p_s if and only if the F^p-norm of $|z|^s f(z)$ is finite. We also characterize the Carleson measures for the spaces F^p_s, establish the boundedness of the weighted Fock projection on appropriate L^p spaces, identify the Banach dual of F^p_s, and compute the complex interpolation space between two F^p_s spaces. (Received September 16, 2011)