1093-16-88 **Xingting Wang*** (xingting@uw.edu), Department of Mathematics, University of Washington, Seattle, WA 98105. *Finite-dimensional connected Hopf algebras.* Preliminary report.

Let H be a finite-dimensional connected Hopf algebra over an algebraically closed field $\mathbf{k}$ of characteristic $p > 0$. We provide the algebra structure of the associated graded Hopf algebra $\mathrm{gr}H$. Then, we study the case when H is generated by a Hopf subalgebra K and another element, and the case when H is cocommutative. When H is a restricted universal enveloping algebra, we give a specific basis for the second term of the Hochschild cohomology of the coalgebra H with coefficients in the trivial H-bicomodule $\mathbf{k}$. (Received August 01, 2013)