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and **Mufutau B Akinwande** (akinwamb@clarkson.edu). *A recursive Construction of
Non-binary de Bruijn Sequences.*

We present a method to find new non-binary de Bruijn sequences of arbitrary order based on ones of lesser order. This is done recursively by mapping an existing de Bruijn sequence—regarded as a cycle in a de Bruijn digraph—to several vertex disjoint cycles in a higher order de Bruijn digraph. A new de Bruijn sequence is then obtained by connecting these cycles in any one of many different ways. This construction generalizes a well known binary construction due to Lempel. (Received September 21, 2010)