1106-H1-1669 **Reza Sarhangi*** (rsarhangi@towson.edu), Department of Mathematics, Towson University, 8000 York Road, Towson, MD 21252. *Methods for Creating Mosaic Designs*.

There are a few methods for constructing some interlocking star patterns that are presented:

- (a) The Radial Grid Method: A method that was used in medieval times, which is supported by the 13th century treatise, Interlocks of Similar or Complementary Figures.
- (b) The Polygons in Contact Method: In some literature, another technique, "polygons in contact" (PIC), has been introduced and discussed in a few recent articles. This is another system for which there exists evidence of historical use by designers.
- (c) A Method based on the n/k Star Polygons: One may construct the same pattern using a technique based on the use of a 10/3 star polygon and the extensions of some of its sides.
- (d) Modularity Method: Modularity offers another interesting approach for creating the layout of a mosaic pattern (that is, for conceptualizing but not necessarily making the individual actual tiles that compose the final tiling). This method has been suggested as the means used in ancient cultures, such as those during the Paleolithic period. (Received September 14, 2014)