My interest lies in obtaining a coherent understanding of the appearance of collective modes in the strongly interacting system of protons and neutrons that are the essential building blocks of nuclei.

In particular I want to formulate the basis of the appearance of various nuclear shapes (even for a given number of protons and neutrons) which is called nuclear Shape Coexistence, on which I work jointly with my longtime coworker John Wood, prof. emeritus at Georgia Tech in Atlanta who has been a regular visitor in Gent.

Present work concerns research trying to set up as consistent as possible a description of the appearance of shape coexistence, as well as the possibility of collective excitations such as vibrational modes, rotational properties, etc. Here the importance of symmetries plays a major role in most cases.

Jointly with Prof. em. John Wood, we were invited by the Institute of Physics as the editors of a new book series on the many advances in nuclear physics, explaining the essential basis for new experiments at the ISOLDE FACILITY at CERN, as well as at various facilities spread worldwide.

At this moment, three volumes have been published. There is much more to come and thus one major activity relies on formulating in a pedagogical way the basis of nuclear physics (both theory and experiment).

The titles presently available can be consulted by going to the web site of this series googling "IOP new series in Nuclear Spectroscopy and Nuclear Structue" and for each of the volumes already available there is an introduction and the books, and in particular the presently available volumes from Heyde, Wood, and David Jenkins.

The research is neither 100% theoretical nor 100% experimental, which in the latter case most often implies to be in contact with other universities with long running joint projects at the Univ. of Leuven and the University of Köln (Prof. Jan Jolie, a former student at the UGENT.