The purpose of the research is to reveal the unique nodes of lymph organization microanatomically and to define microelemental specifics of their formation in different regions of the lymphatic system according to structural and functional nodes of lymphatics. The method that was used was morphological analysis and radiation synchrotron analysis with fluorescent X-ray properties of the tissue.

We obtained the evidence of forming of lymphoid-microelement association. This association is active and defines proliferation of lymphoid cells and development of an immune response according to morphological variant of lymph nodes structure. The content of trace elements is considered as the leading mechanism in limitation of the structural organization of the lymph nodes belonging to different lymphatic regions. SR XRF is an informative method for understanding the region-dependent content of trace elements for modification of structure of lymph nodes. This method is of essential interest from the theoretical and practical point of view.