1145-16-250   **Garri Davydyan*** (`garri.davydyan@gmail.com`), 213-224 Viewmount Drive, Nepean, Ontario K2E 0B4, Canada. *Split-quaternion representation of a functional hierarchy of a biologic system.* Preliminary report.

Previously it was proposed that three regulatory patterns (negative feedback, positive feedback and reciprocal links) determine a functional cor of biologic systems. As a math structure each pattern is represented by a second order matrix over R, M(2,R). Evolution of biologic systems occurs through the formation of more complex, organized in hierarchy, steady functional structures. It is assumed that R, C, H entries on M(2,*) module represent a sequence of hierarchical levels obtained by a functional splitting of characters during biologic development. (Received August 24, 2018)