Using additional equipment allows you to get information about the patients’ problems to plan the subsequent functional treatment. One of the important components that need to consider in the prosthodontic treatment planning is the individual trajectory of lower jaw movement. To register lower jaw articulation we use a new optical axiograph Dentograf, allowing obtaining the necessary data for programming mechanical and virtual articulator. This device may use in patients with any pathology of occlusion. The use of mechanical articulator allows producing prosthodontic constructions according to the individual protrusion and laterotrusion movements. In our study, we tried to reproduce additional, previously not used movements using plaster models of jaws: chewing, mouth opening. As a result, we have significantly upgraded the classical structure of the mechanical articulator. Our researches and using of additional devices formed the basis for articulation concept FIRA, which consists in the study and analysis of individual trajectories of lower jaw movement and implementing the data in the subsequent treatment. To minimize errors in the planning of functional treatment we have tried to eliminate unnecessary digital recounts of joint trajectories for obtaining numerical values of angles for programming the mechanical articulator.

Biography
Evgeny Roshchin in 2004 graduated from the Moscow State University of Medicine and Dentistry. He is a Doctor prosthodontist and an orthodontist dentist. He has obtained his PhD in 2011. He is the author of 13 patents. The main area of research is devoted to functional diagnostics in dentistry and analysis of the parameters involved in the articulation of the lower jaw. He is the author of new diagnostic algorithms for patients with TMJ dysfunction. In 2013, he became the Director of Prosystom. In 2016, this company has developed a new sensor that allows you to record the presence of bruxism patients during sleep.

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