- Comprehensive studies of the stratigraphy in sedimentary basins and correlations between diverse-facial geological formations;
- Selection and study of reference model section of the Precambrian and Phanerozoic periods at the regional stage of the territory geological exploration that constitute the fundamental basis of its systematic geological development;
- Independent expert assessment of the regional and local stratigraphic framework used in conducting of geological explorations in Siberia (subordinated SibRMSK); revision of stratigraphic models and legends to the geological maps elaborated in the twentieth century, as well as the development of a new generation models upgraded in terms of content and form; systematization of stratigraphic units used in geological practice in Siberia;
- Improvement of theoretical fundamentals and stratigraphy methods (identification of correlations between the development of geologic bodies and biotic systems and sedimentation, hydrodynamic, climatic, geodynamic and other processes; specific features in stratigraphy of the basins with carbonate and terrigenic sedimentation; substantiation of boundaries between stratigraphic units, zonal subdivision, evolutionary processes in development of biota; selection of methods including those of nonbiological nature, which are the most effective in geological practice); development of recommendations;
- Establishment and improvement of paleogeographic, paleobiogeographic, paleoclimatic and paleolandscape backstripping, facial zoning models, models of sedimentation and development of basins with carbonate and terrigenic sedimentation as a basis for correct elaboration of facial stratigraphic scales and stratigraphic models;
- Improvement of International and Common (Russian) layered stratigraphic scales;
- Study and monographic description of the organic residues that provide the justification for the age of the identified stratigraphic units;
- Paleontological and stratigraphic support to all types of geological and geophysical works.
- Study of dependencies in development and forecast non-structural hydrocarbon traps in oil and gas basins.
- Identification of sedimentary lithogenetic and structural-tectonic criteria for forecasting of oil and gas potential.
- Performance of regional stratigraphic, detailed paleontological and biostratigraphic studies in the purposes of dating and correlation of the deposits.
- Performance of paleogeographic backstripping on the basis of integrated interpretation of the drill samples, logging and seismics, bio-facial studies, elaboration of facialpaleogeographic maps of oil and gas provinces for refining of the hydrocarbon potential.
- Development and improvement of the integrated methodology for forecasting of non-structural hydrocarbon traps in oil and gas basins.
- Development of lithologic and genetic models for deposits of oil and gas hydrocarbon potential assets.