Name of the Educational Institution	**Batumi Shota Rustaveli State University;** **Address: N 35 Ninoshvili st. Batumi, 6010; Georgia** **Telephone/Fax: (+995 222) 27 17 87** **E-mail: info@bsu.edu.ge**
Title of the Educational Programmeme	**Analysis of Natural Compounds** The third level educational programmeme of the higher academic education (Doctorate)
Qualification Conferred	**Doctor of Chemistry**
Programmeme Volume in Credits	The educational programmeme has been developed in accordance with the requirements of National Qualifications Framework and programmeme planning, elaboration and development methodology of developed at BSU. The volume of the programme is 60 Credits. Thereof 45 credits are compulsory, while 15 credits are dedicated to elective courses, as well as assistantship to professor and seminars. Scientific component includes doctoral dissertation. Normative time for preparation of a doctor by the present doctoral programmeme equals to 3 years.
Aim of the Educational Programmeme	Ensure scientific research acivation, which means the implementation of chemical research by modern instrumental methods; form a competitive doctoral student in accordance with the requirements of labour market, who will independently plan and implement research through the utilization of modern instruments. In the framework of the programmeme the following research can be carried out, within the following directions: adaptation and improvement of research methods depending on the research object. -Advance determination of composition and structure of compounds by chemical and physico-chemical methods; -Research of natural compounds by instrumental methods-high pressure liquid and gas-liquid chromatography, photo colorimeter, ultraviolet, visible and infra-red spectroscopy, mass spectrometer, nuclear-magnetic resonance spectroscopy; utilization of high-pressure fluid extraction in research; -Complex and comparative research of biologically active compounds during the impact of agro ecological factors and recycling-storage procedure. -Ascertainment of the antioxidant and other types of activity of the substances, determination of the perspectives for using the results of the research, and making the appropriate conclusions.
Learning Outcomes	The graduate of the DR Educational Programmeme in Chemistry will know: - Modern methods of chemical research; -Chemical, physico-chemical and modern instrumental methods of qualitative and quantitative analysis for ascertaining the composition and structure of natural compounds. -The ongoing chemical reactions with their participation and their mechanisms of progress. **-will have acknowledged** the latest achievement-based knowledge in the field of Chemistry, which gives him/her the possibility to enhance existing knowledge and use innovative methods; Within the scope of the indicated specialization, the graduate **will be able to**: -develop new research and analytical methods and approaches in Chemistry that are oriented on creation new knowledge; -conduct experimental research in Chemistry and implement the results in practice; -plan and conduct innovative research in Chemistry independently by protecting the principles of academic integrity; -adapt or design new research and analytical methods depending on the object of research; do an active research; **Will have the ability to:** - operate the group of Chemist researchers effectively, formulate the objectives clearly and use the

	abilities of the group members adequately. -make new, effective decisions to solve a problem independently by reconciling conflicting ideas; -develop and apply new, adapted or improved methods of analysis and research;
Rule of Assessment	Assessment of the student's knowledge is carried out in accordance with the order of the Minister of Education and Science and the relevant doctoral regulations of the BSU Academic Council. Assessment of the student's knowledge is done by a 100-point scale system (current assessment - 40 points, midterm exam - 20 points, final exam - 40 points). In each component of the current assessment of each particular study course, the student can accumulate a certain number of points. The maximum number of points is indicated in the corresponding syllabus and determined by the professor individually. Prerequisite for the admission to the final exam: the minimum competence limit of midterm assessment is 21 points while minimum competence limit for the final exam is 20 points; The final assessment of the student: The student will be considered to have mastered the course if he/she receives one of the following positive points: (A) – Excellent 91-100 points; (B) – Very Good 81-90 points; (C) – Good 71-80 points; (D)– Satisfactory 61-70 points; (E)– Sufficient 51-60 points; Negative evaluations are: (FX) Could not pass - in case of getting 41-50 points the student is allowed to take the additional exam. (F) Failed - 40 points or less the student has to take the study course from the beginning. Public defense (performance) of the dissertation ends with its evaluation. The dissertation is evaluated confidentially by the members of the field dissertation commission, with the following evaluations: A) Excellent (Summacumlaude)- an excellent work; B) Very good (magnacumlaude) - a result exceeds the set requirements in every way; C) Good (cumlaude) - the result that exceeds the set requirements; D) Medium (bene) - an intermediate level of work that meets the basic requirements; E) Satisfactory (rite) - the result that despite the shortcomings, still meets the requirements; F) Insufficient (insufficient) - unsatisfactory level of work that fails to meet the set requirements due to significant shortcomings; g) Completely Unsatisfactory (subomnicanone) - the result that cannot meet the set requirements at all.
Contact Person	Programmeme leader: Maia Vanidze, Associate professor, Department of Chemistry #93/99 ap./21 King Parnavaz st.;Batumi Telephone: (+995) 599 18 23 22; (+995) 577 73 55 44 E-mail: vanidze.maia@bsu.edu.ge