# Лесотехнически университет Агрономически факултет № АФ - 8423 СОФИЯ. ОТ 11. 20247.

### STATEMENT

related to the contest on the candidate's documents and materials supplied for the academic position "professor", in the field of higher education 6. Agricultural sciences and veterinary medicine, in the professional field 6.1. Plant growing, on the scientific specialty "Agrochemistry", the discipline "Agrochemistry", announced by the University of Forestry in SG no. 59/12.7.2024, procedure code AGR-P-0524-132.

### Candidate for participation in the contest:

1. Associate Professor DSc. Veselin Iliev Kutev, from the Department of Agronomy, at the Forestry University, Sofia

Prepared the statement: Dr. Toma Angelov Shishkov, Professor in the professional field 6.1. Plant growing, on the scientific specialty "Soil Science", from the Institute of Soil Science, Agrotechnology and Plant Protection "Nikola Poushkarov", Sofia, appointed as a member of the scientific jury by the order No. 3ΠC-515/18.09.2024 of the Rector of Forestry University

### 1. Brief candidate's biographical data

Associate Professor Veselin Iliev Kutev was born on February 16, 1961. He graduated from the State Agrarian University "V.V. Dokuchaev", Kharkiv, Ukraine in 1987, defending a thesis in the Department of "Agrochemistry" on the topic: "Influence of the different phosphate levels on the efficiency and degree of use of nitrogen fertilizers in the conditions of Typical Chernozem (applying <sup>15</sup>N), with acquisition of a professional qualification in "Agrochemistry and Soil science".

In 1995, he defended the doctoral thesis on the topic: "Investigation of nitrogen mineralization in the conditions of laboratory, vessel and microfield experiments (using <sup>15</sup>N)".

In 2013 he was awarded the scientific degree "Doctor of Sciences" in the professional field 6.1. Plant growing, on the scientific specialty "Agrochemistry" after a successful dissertation defense on the topic: "Geostatistical approach to the study of the spatial variation of soil parameters for the needs of agrochemical studies and agriculture".

Associate Professor Veselin Kutev's professional development has included 27 years of work experience in the "Agrochemistry" Department, at the "Nikola Pushkarov" Institute of Soil Science, Agrotechnologies and Plant Protection, Agricultural Academy, and this determined his professional development. Successively, during the period 1988-1991 he was a PHd student, and in 1991-1998 he was an agrochemist in the laboratory "Use of labeled nitrogen - <sup>15</sup>N" the Department of "Agrochemistry", at the of the IPAZR "N. Pushkarov". During the period 1998-2004 he was a research associate, the first degree, during the period 2004-2014 he was an associate professor on the scientific specialty "Agrochemistry" at the IPAZR "N. Pushkarov", and since 2014 until now, he has been an associate professor with 10 year work experience on the discipline "Agrochemistry" at the Department of "Agriculture and Herbology" at the Forestry University, Sofia.

### 2. Compliance of the candidate's submitted documents and materials with those required according to the Regulations for the Development of the Academic Staff at the Forestry University

The contest on the academic position "professor", in the field of higher education 6. Agricultural sciences and veterinary medicine, the professional field 6.1. Plant growing, on the scientific specialty "Agrochemistry", the discipline "Agrochemistry", has been declared for the requirement of the Faculty of Agronomy at the University of Forestry, Sofia. The

candidate in the contest is DSc. Veselin Iliev Kutev, Associate Professor in the Department of Agronomy, at the Forestry University, Sofia. The materials for the contest contain evidentiary documents certifying the fulfillment of the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and its Regulations for the implementation, as well as the Regulations for the Development of the Academic Staff at the Forestry University.

3. Evaluation of the candidate's pedagogue activity

Associate Professor, DSc. Vesselin Kutev for the period 2016-2019 held on to the position of head of the Department of "Agriculture and Herbology" at the Faculty of Agronomy, and from 2024 until now, he is temporarily acquiring as the head of the Department of Agronomy at the Faculty of Agronomy at the Forestry University, Sofia. The pedagogue activity of Associate Professor DSc. Vesselin Kutev includes the development of pedagogue programs, with theoretical and practical training for the requirement of the Faculty of Agronomy at the University of Forestry, Sofia

- in the disciplines "Agrochemistry and Plant Growing", at the Department of "Agronomy", full-time and part-time training on the specialties "Agronomy and Plant Protection", for the educational-qualification degree "Bachelor".

- in the discipline "Plant Growing", at the "Plant Protection" Department, regular training on the "Plant Protection" specialty, for the educational-qualification degree "Bachelor".

- in the disciplines "Agrotechnics and Fertilization", "Precision Plant Breeding" and "Soil Fertility Management", at the Department of "Agronomy", regular and part-time training oin the specialty "Field Growing", for the educational and qualification degree "Master".

- in the disciplines "Management of organic residues" and "Minimum and zero tillage", at the Department of "Agronomy", full-time and part-time training on the specialty "Regenerative agriculture", for the educational and qualification degree "master".

- in the discipline "Good practices in manure management", at the "Agronomy" Department, full-time and part-time training on the specialty "Sustainable production of fodder crops", for the educational and qualification degree "Master".

- in the discipline "Plant Fertilization in Precision Agriculture", at the Department of "Agronomy", full-time and part-time training on the specialty "Precision Agriculture", for the educational and qualification degree "Master".

### 4. Evaluation of the candidate's scientific, research-applied and publication activity 4.1. Participation in scientific, research-applied and educational projects

Associate Professor, DSc. Veselin Kutev has profound expert and organizational experience in laboratory and field research, and applied research in the field of statistics, as well as the ability to work with various software products, as well as sound agrochemical knowledge, which is proven by the scientific research activity, including 11 number of research projects submitted for the contest. International projects are three, one of these guided by him; he also guided the three projects with bilateral cooperation (between Greece, Belgium and Austria); other three projects were funded by MES/FNI, one of these guided by him; he participated in 2 national projects, one of which was funded by the BAS.

The candidate's good communication and organizational skills should be noted, particular the organization of the international conference in 2008 and his capacity as the head of the "Bureau for the Transfer of Technological Solutions" during 2012-2014 and the numerous contacts held with farmers on the issues of precision agriculture service.

During the period 1995-2010, he participated abroad in nine specializations by experience exchange and qualification improvement mainly during his work experience at the IPAZR "N. Pushkarov".

### 4.2. Characteristics of published scientific results

Related to the contest, the candidate Associate Professor, DSc. Veselin Kutev presented total number of 50 scientific papers, he was self-authored 3 of these. Most scientific works are co-authored by one or more authors, of which at 5 publications he is the first author in co-authorship with second author (of a total of 13); on 10 publications he is the first author in co-authorship with more authors (of a total of 34 publications) or is the second author (in 4 articles). The submitted materials in the contest for the academic position "professor" to the indicator (A1) is doctor thesis (50 points); to the indicator (B2) diploma for dissertation for the scientific degree "Doctor of Sciences" (100 points); to the indicator (B4), a total of 11 publications in co-authorship with a total of 121.7 points are presented, of which: 2 are entered with IF, with impact-rank (SJR) and with index Q3; 1 publication is with impact rank (SJR) and index Q3; 3 publications have an impact rank (SJR) and index H; and 5 publications are with impact-rank (SJR).

A monograph (16.7 points) is presented for the indicator (G5); two books recorded in the NACID register (80 points) are presented for the indicator (G6); for the indicator (G7 publications in the international journals referenced and indexed in the world systems) 16 articles are presented (174.8 points); for the indicator (G8 publications in the international journals not referenced in the world systems) 19 articles are presented (51.09 points); for the indicator (D11) a chapter from a collective monograph is presented (20 points). There are total of 342.6 points per the group of indicators (G).

The 31 candidate's publications are in English language, which makes them widely accessible to the scientists from all over the world, as 25 reports of which are from participation in the specialized international scientific sessions and conferences, which fact proves the scientific activity presenting the results of research at national and international forums.

Indicator (E) (total of 425 points) refers to: (E16) the scientific degree "Doctor of Sciences"; to the indicator (E17) are indicated the guidance of graduated 4 PHd students; to the indicators (E18,19,20,21) are indicated the participation and guidance of 6 national and international scientific or educational projects, to the indicator (E23) a university textbook is presented, of which the candidate is the first author in co-authorship with second author.

Associate Professor DSc. Veselin Kutev fully meets the requirements of the Regulations for the Development of the Academic Staff at the Forestry University for the professor academic position.

## **4.3.** Reflection of the candidate's scientific activity in the literature (quotation) Indicator (D13) includes three cited publications with a total of 15 quotations in scientific publications referenced and indexed in the world systems with IF, with impact-rank (SJR), with index Q and with index H (a total of 225 points). No other cited publications are

### 4.4. Inputs of the candidate in the publications (scientific, research-applied, applied)

indicated.

Associate Professor DSc. Vesselin Kutev has indicated a total of 46 inputs in the publications presented, covering scientific and research-applied activities, which are the result of the ability to work in teams with different professional orientations. Formulated inputs by the candidate are rather conclusions from the publication activity presented for the contest. As scientific inputs in the publications, I would indicate the following:

 Spatial survey with application of geostatic analysis of nitrogen efficiency, including residual mineral nitrogen, and available forms of phosphorus and potassium at optimized fertilization rates; - Parametric determination of transformation and immobilization of labeled ammonium and nitrate nitrogen using the Kriging method for visual presentation of maps;

 Application of land cover models to determine gravity water flows, including for the control of groundwater pollution with nitrates:

As research-applied inputs, I would indicate the following:

- Diagnostic, using the remote sensing and digital vegetation indices (markers), of the vegetative status of wheat, rapeseed, vegetable crops, and coniferous forest areas;
- Application of a digital model for the simulation and determination of the magnetospheres' magnetic field and interaction with the solar wind.
- Spatial analysis of climate data in conditions of reduced amounts of precipitation with the application of climate models;
- Application of geostatictical methods to study the mobility of organic carbon along the profile of sandy soils.

### 5. Evaluation of the candidate's personal contribution

Competencies of Associate Professor, DSc. Veselin Kutev are defining the personal contribution by him in the field of agrochemical studies of nitrogen transformations in soils, including mineral and organic fertilization and plant nutrition, selection of appropriate fertilizers depending on the characteristics of crops and soils, leaching of nitrates in groundwater, spatial variation of nutrients as a component of precision agriculture.

### 6. Critical notes and recommendations

A list of the publication activity corresponding to the minimum national requirements for occupying the academic position "professor" is presented, as well as a summarized chronological list of the publications by years from 1987 to 2024. My note, the candidate should have prepared a list of publications declare that have not participated in previous procedures in the academic growth for the specified period. The university curriculums developed for the contest should reflect their approval at the Forestry University.

### 7. Personal impressions

My positive assessment of the scientific and research activity of Associate Professor, DSc. Vesselin Kutev is also based on personal impressions - with a profound interest in research, with high professional competence, expertise on modern methods and ability to work in teams with different professional orientations, with high potential, and knowledge applicable in scientific and pedagogue activities.

#### 8. Conclusion

After the assessment with the materials and scientific publications supplied for the contest and based on the analysis, gives to me grounds to present a positive statement and to suggest the candidate Associate professor DSc. Vesselin Iliev Kutev to be acquired for the academic position "professor" in the discipline "Agrochemistry", from the professional direction 6.1. Plant growing.

Prepared the statement: Member of the scientific jury: Prof. Dr. Toma Shishkov

The statement was supplied on: 07.11.2024.