

# REVIEW

by Assoc. Prof. Dr. Petia Koprinkova-Hristova, ИИСТ – БАН

**for the competition for the academic position “Professor” in professional field 4.6 “Informatics and computer sciences”, announced in Official gazette No 49 on 21.06.2019 for the needs of the Institute of Information and Communication Technologies – BAS, Department of Linguistic modelling and knowledge processing**

**with sole candidate Assoc. Prof. Dr. Kiril Ivanov Simov**

The candidate Assoc. Prof. Kiril Simov submitted all documents required according to the Law for academic staff development in Republic of Bulgaria, regulations for its application and specific demands in the ИИСТ – БАН regulations, as follows: CV in European format; copy of diploma for educational and scientific degree “doctor”; testimonial letter for the length of service on specialty; list of scientific publications for the competition; list of citations; abstracts of publications in Bulgarian and English languages; copies of all publications; check up for fulfillment of the minimal national requirements of clause 26, paragraphs 2 and 3 of the ИИСТ – БАН regulations in clause 26, paragraph 5, based on the submitted documents for the competition; information for the original scientific and applied research contributions; declaration that there is now proven by law plagiarism in his research works.

From the submitted documents it is clear that the candidate fulfills all obligatory demands of the Law for academic staff development in the Republic of Bulgaria and the specific demands in its application rules of ИИСТ – БАН, as follows:

1. He has educational and scientific degree “Doctor” – submitted copy of diploma from High Certifying Commission №30740 from 31.07.2006.
2. He occupied the academic position “Associate Professor” more than two years – submitted testimonial letter from ИИСТ – БАН for 12 years employment as “Assoc. Prof.” and total employment for than 34 years.

3. He submitted a list of scientific publications published in referred and indexed in universally known scientific data bases, that are different from the publications presented for fulfillment of doctoral degree and habilitation, separated in two groups as follows:

*Group of indicators B* (publications covering requirements for habilitation work): totally 15 papers, 3 of which in sources with SJR rank and 12 referred in Scopus, with which the candidate achieves 120 points, exceeding by 20% minimally demanded 100 points for this group.

*Group of indicators Γ* (other publications): totally 19 publications, 12 of which in sources with SJR rank and 7 referred in Scopus, with which the candidate achieves 324 points, exceeding by 25% minimally demanded 260 points for this group.

4. He submitted other documents to proof fulfillment of minimal national and specific for IICT – BAS demands for academic position “Professor”, as follows:

*Group of indicators Д* (citations): the list consists of 8 papers having totally 38 citations, with which the candidate achieves 228 points, exceeding by almost 70% minimally demanded 140 points for this group.

*Group of indicators E*: guidance of two PhD students who received doctoral degree and of 8 European projects with impressive total funding outcomes of 380362 Евро or 743923.41 BGN, with which the candidate achieves 648 points, exceeding more than 4 times minimally demanded 150 points for this group.

5. He submitted information for his original scientific and applied research contributions that reflects correctly the content of the publications submitted for this competition.
6. There is no any proof for plagiarism – a relevant declaration, which I accept completely, is submitted.

In summary, the scientific indicators of the candidate completely fulfill and considerably exceed minimal requirements of the Law for academic staff development and the regulations for its application as well as increased specific requirements of the IICT – BAS regulations.

I accept the contributions of Assoc. Prof. Kiril Simov, presented in the submitted “Information for the original scientific and applied research contributions”. They could be summarized briefly as follows:

1. Publications covering requirements for habilitation work:

Scientific contributions of the candidate are related with development of methodology for extraction of new knowledge from text by means of its relation with ontologies and dictionaries, as well as with development of specialized ontologies by means of automatic extraction of terminological dictionaries from text.

Applied research contributions are related with applications of the developed methodologies for building of specialized ontologies in the areas of information technologies, homemade textiles, Bulgarian iconography and ontology-based dictionary of the Bulgarian language; applications in electronic education on different languages for search in teaching material and text annotation.

2. Other publications:

Contributions in that section are conditionally divided into two groups:

a. Development of language technologies and resources

- Scientific contributions are related to development of technologies for automatic text processing by means of extended dependent tree, consolidation of several parsers information and sentences structure extraction.
- Applied research contributions are related to creation of new language resources like political speech corpus, valent dictionary of the Bulgarian language, system for transcription of other languages to Bulgarian, design of systems for grammatical annotation, named entities recognition and syntactic analyses and systems for question answering.

b. Development of semantic technologies and resources

- Scientific contributions are related to development of algorithms for extraction of new dependences and extension of knowledge graphs.
- Applied research contributions are related to consolidation of data bases accompanied by their contradictions detection and with development of relations between ontologies and text on several European languages.

Especially important contribution of Assoc. Prof. Simov is application of all developed by him methods and technologies on Bulgarian language.

Description at the end of the contributions information of candidate's intentions for future work towards application of contemporary artificial intelligence methods in his research makes good impression. I have personal impressions from our collaboration on recently finished project funded by the Bulgarian Science Fund that part of these planes are already realized, although these results are not included in documents submitted for this competition.

Besides presented for this competition publications, Assoc. Prof. Kiril Simov has attached to its CV a list of totally 180 publications. Check up in the world-famous data bases for scientific information reveals that he is author or co-author of totally 68 papers in Scopus, 41 in Web of Science and 246 in Scholar Google and their citations are as follows: 196 in Scopus with h-index 7; 65 in Web of Science with h-index 5; 1911 in Scholar Google with h index 21. All

these are evidences about his significant authority as scientist, recognized in world scientific community.

Attachments to his CV contain also a list of totally 19 scientific projects, only 3 of which are national and the rest 16 are international once and he was project leader of most of them (16 out of 19 projects). Besides Assoc. Prof. Kiril Simov took part in organizing committees of 22 international conferences. There is no information concerning his participation in International Program Committees as well about his reviewing activities, I am convinced he has, considering his capacity as scientist and his membership in several authoritative international and national scientific organizations, described in his CV.

I know Assoc. Prof. Kiril Simov from our common work on leded by him and already finished project, funded by the Bulgarian Science Fund, as a result of which we have three common papers, which are not included in this competition. My opinion for his capacity as scientist specialized in the area of computer linguistics as well as scientific leader of projects is excellent.

The aforementioned gives me a good reason to give with conviction **positive assessment** of the materials for participation in the competition and to recommend to the respectful members of the Scientific panel, and then also to the members of the Scientific Council of the Institute of Information and Communication Technologies – BAS to vote for conferring the academic position “**Professor**” on professional field 4.6 “**Informatics and computer sciences**” to **Assoc. Prof. Dr. Kiril Ivanov Simov**.

10.10. 2019 г.

Reviewer:

**NOT FOR  
PUBLIC RELEASE**

(Assoc. Prof. Dr. Petia Koprinkova-Hristova, IIKT – BAS)