



## Review

**on a competition for the academic position "Associate Professor" at  
the Thracian University, Stara Zagora  
in the field of higher education 4. "Natural Sciences, Mathematics and  
Informatics",  
professional strand 4.6. "Informatics and Computer Science"  
declared in SG 24/03/2022.  
with the sole candidate Dr. Emil Georgiev Delinov**

**Reviewer: Prof. Radoslav D. Yoshinov, PhD.**

In connection with the competition procedure at the Thracian University, Stara Zagora for the academic position "Associate Professor" in Informatics, in the field of higher education 4. "Natural Sciences, Mathematics and Informatics", professional department 4.6 "Informatics and Computer Science", announced in SG issue 4.6 24 of 25.0 3.2022 for the needs of the Department of Informatics and Mathematics, at the Faculty of Economics at the Thracian University, Stara Zagora and in accordance with Article 4 of the Law on the Development of Academic Staff in the Republic of Bulgaria, Decree No26 of 19 February 2019, PRASTRU and the specific requirements of the Faculty of Economics at the Thracian University, Stara Zagora I am appointed a member of the scientific jury by order of the Rector of the Thracian University.

For participation in the competition for the academic position "Associate **Professor**" professionally 4.6 "Informatics and Computer Science", specialty "Informatics" has submitted documents the candidate Dr. Emil Delinov with address 46 Ship Mountain, Sofia.

As a member of the Scientific Jury, I have received:

1. Order of the Rector of the Thracian University to conduct the competition for the academic position.
2. Application to the Dean.
3. Statement of assurance of the materials submitted and the information therefor in accordance with Annex 92.
4. Employment contracts, protocols and copies of a work book – 10 p.
5. Information card for a busy academic position.
6. Copy of the advertisement in the State Gazette.
7. Notarized copy of a diploma of higher education.
8. Notarized copy of the diploma for "Doctor".
9. Cv.

10. Summaries of work, after protection of doctoral thesis.
11. List of publications for the competition.
12. 10a. Extended list of publications.
13. Copies of publications.
  - Monograph – habilitating work.
  - A copy in Automation and Computing.
  - A copy in Mathematics and Informatics.
  - A copy in Pedagogy.
  - Copy in Electronics 2022- 2 pcs.
  - Book «Application of vectors for solving tasks in mathematics and physics».
  - Book «Menelaus theorem for triangle and tetrahedr».
14. List and copy of the required number of citations
  - Daniel
  - Kurkchiev - Pliska
  - Shotlekov - Pedagogy
  - Stoyanova – 9 pcs. Electronics 2022
15. Reference to the original scientific contributions to scientific papers
16. List of habilitated co-authors
17. Document for proficiency in a foreign language – 3 pcs.
18. Criminal record certificate
19. Reference to the fulfilment of the minimum national requirements and additional requirements laid down in those Rules (accompanied by evidence)
20. Reference to the fulfilment of the minimum national requirements and additional requirements laid down in these Rules (accompanied by evidence) – option 2.
21. TSB report on impact factor and impact rank (if any)
22. TSB reference for citations included in the Web of Science and/or Scopus databases
23. Additional documents

Note: all required documents in the competition were also provided in electronic form.

I was selected as a reviewer under the procedure of the first meeting of the scientific jury on 06.06.2022, .

Candidates for the academic position "Associate Professor" must meet the requirements described in the **Law on Development of Academic Staff in the Republic of Bulgaria (HRASRB) of Art. 24(1)**, the Regulations for implementation

of the ZZRB (PPP), the PraSTRU and the specific requirements of the Faculty of Economics at the Thracian University, stara Zagora

1. (additional note) - SG 30/18, in force from 04.05.2018, additional to - SG 56/2022) to have acquired an educational and scientific degree "Doctor", which for the specialties of regulated professions must be of the same specialty as for specialties from the regulated professions in the professional field "Health care" the academic position can be held by a person, possessing an educational and scientific degree "Doctor" in specialty from the regulated professions in professional fields "Medicine", "Dental Medicine", "Pharmacy" or "Public Health";
2. not less than two years:
  - (a) have held an academic position of assistant, assistant master, or
  - (b) have been teachers, including honorees, or members of a research team at the same or another higher school or scientific organisation, or
  - (c) have pursued artistic activity, or
  - (d) have been specialists in practice and have proven achievements in their field;
3. have submitted published monographic work or equivalent publications in specialized scientific publications or evidence of relevant artistic achievements in the field of the arts, which do not repeat those presented for the acquisition of the educational and scientific degree "Doctor" and for the acquisition of the scientific degree "Doctor of Sciences";
4. (new – SG 30/18, in force from 04.05.2018) to meet the minimum national requirements under Art. 2b, para. 2 and 3, respectively, to the requirements of Art. 2b, para. 5;
5. (new – SG 30/18, in force from 04.05.2018, additional – SG 56/2022) they have no statutory plagiarism or intrust of the scientific data submitted in the scientific papers.

The candidate Dr. Emil Delinov holds the educational degree "Doctor" from 2016.

According to the documents and certificates of service provided, the applicant Dr. Emil Delinov has an internship in the position of "assistant" (and "st. more than 2 years and has been a teacher for more than 20 years.

Table showing compliance by points of the minimum required points by group of indicators for acad. position associate professor and their respective implementation by the candidate Dr. Emil Delinov:

<p style="text-align: center;"><b>Reference of Dr. Emil Delinov on compliance with the National Minimum Requirements for acquisition of the academic position "Associate Professor" under 4.6. Informatics and Computer Science</b></p>
---

Scoreboard of indicators	Required number of points	Indicator	Points												
<b>But</b>	<b>50</b>		<b>50</b>												
		<b>A1. Dissertation on the award of educational and scientific degree "Doctor" (50 t.)</b>													
<b>In</b>	<b>100</b>		<b>100</b>												
		<b>B3. Habilitating work (100 t.)</b> Delinov, E., Optimization of infrastructure with cloud technologies, University Publishing Houses "Paisii Hilendarski, Plovdiv, 2022", ISBN 978-619-202-763-6													
<b>D</b>	<b>200</b>		<b>231</b>												
		<b>G7. Scientific publication in publications that are referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus), outside of habilitation work</b>													
		<table border="1"> <thead> <tr> <th>Title</th> <th>Base</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td>Delinov, E., System for telecommunications preparation of data in real-time mode, Automatic computing equipment and automated systems, Pc. 2015/11 12, Sofia, 1987, c. 42-44, ISSN 0205-1745</td> <td>Zentralblatt MATH</td> <td>18</td> </tr> <tr> <td>Grapev, S., I. Marasheva, E. Delinov, Sigma Mathematical Club in light of success project [The Mathematical Club "Sigma" in the Light of the Project Success], SUCCESS, Mathematics and Informatics, 2012, issue 5, p. 453 – 460, ISSN 1310-2230</td> <td>Top</td> <td>36</td> </tr> <tr> <td>Marasheva-Delinova, I., E. Delinov, A system for forming a fixed-term and annual evaluation in mathematics and information technologies, Scientific Journal "Pedagogy", issue 9/2022</td> <td>Top</td> <td>36</td> </tr> </tbody> </table>	Title	Base	Points	Delinov, E., System for telecommunications preparation of data in real-time mode, Automatic computing equipment and automated systems, Pc. 2015/11 12, Sofia, 1987, c. 42-44, ISSN 0205-1745	Zentralblatt MATH	18	Grapev, S., I. Marasheva, E. Delinov, Sigma Mathematical Club in light of success project [The Mathematical Club "Sigma" in the Light of the Project Success], SUCCESS, Mathematics and Informatics, 2012, issue 5, p. 453 – 460, ISSN 1310-2230	Top	36	Marasheva-Delinova, I., E. Delinov, A system for forming a fixed-term and annual evaluation in mathematics and information technologies, Scientific Journal "Pedagogy", issue 9/2022	Top	36	<b>126</b>
Title	Base	Points													
Delinov, E., System for telecommunications preparation of data in real-time mode, Automatic computing equipment and automated systems, Pc. 2015/11 12, Sofia, 1987, c. 42-44, ISSN 0205-1745	Zentralblatt MATH	18													
Grapev, S., I. Marasheva, E. Delinov, Sigma Mathematical Club in light of success project [The Mathematical Club "Sigma" in the Light of the Project Success], SUCCESS, Mathematics and Informatics, 2012, issue 5, p. 453 – 460, ISSN 1310-2230	Top	36													
Marasheva-Delinova, I., E. Delinov, A system for forming a fixed-term and annual evaluation in mathematics and information technologies, Scientific Journal "Pedagogy", issue 9/2022	Top	36													

		Delinov, E., A. Stoyanova, I. Marasheva, On the suitability of Cloud Computing as an information aggregating environment from monitoring systems, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022	IEEE Xplore	18	
		Delinov, E., A. Stoyanova, I. Marasheva, An Approach for an Application of Cloud Computing in Testing Connectivity of Monitoring Systems, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022	IEEE Xplore	18	
		<b>G8. Published chapter of a book or collective monograph</b>			
		<b>Book Title</b>	<b>Chapters</b>	<b>Points</b>	
		Stoyanova, A., I. Marasheva, E. Delinov, Theorem of Minelai for Triangle and Tetrahedron, University Publishing Houses "Paisii Hilendarski, Plovdiv, 2022", ISBN 978-619-202-761-2	1, 2, 3	45	105
		Stoyanova, A., I. Marasheva, E. Delinov, Application of vectors for solving tasks in mathematics and physics, University Publishing Houses "Paisii Hilendarski, Plovdiv, 2022", ISBN 978-619-202-764-3	1, 2, 3, 4	60	
<b>E</b>	<b>50</b>				
		<b>D11. Citations in scientific publications, monographs, collective volumes and patents referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)</b> 12 citations, 2 of which are at WoS bases, 9 are in IEEE Xplore and 1 is in MathSciNet			56
	<b>400</b>	<b>Total</b>			<b>437</b>

A more detailed overview of the fulfilment of the minimum national requirements shows that for group indicators D, the items are from articles as follows:

1. Delinov, E., Real-time telecommunications data preparation system, Automation computing and automated systems, Issue 12, Sofia, 1987, c. 42-44, ISSN 0205-1745

The magazine is indexed in Zentralblatt MATH – 6 points by factor 3 – a total of 18 points.

2. Grapev, S., I. Marasheva, E. Delinov, Sigma Mathematical Club in light of success project [The Mathematical Club "Sigma" in the Light of the Project Success], SUCCESS, Mathematics and Informatics, 2012, issue 5, p. 453 – 460, ISSN 1310-2230

The magazine is indexed in WoS and is located in Quartile 4 – 12 points by coefficient 3 – a total of 36 points.

3. Marasheva-Delinova, I., E. Delinov, A System for Forming a Fixed-term and Annual Assessment in Mathematics and Information Technology, Scientific Journal "Pedagogy", issue 9/2022, ISSN 0861–3982

It will be published in the journal Pedagogy, issue 9/2022 (for which there is an official note), which is indexed in WoS and is located in Quartile 4 – 12 points by coefficient 3 – a total of 36 points.

According to Note 10. from Final provisions TO DECREE No 122 OF 29 JUNE 2018 FOR AMENDMENT AND SUPPLEMENTATION OF THE REGULATIONS FOR IMPLEMENTATION OF THE LAW ON THE DEVELOPMENT OF ACADEMIC STAFF IN THE REPUBLIC OF BULGARIA, NAMELY - 10. With a certificate from the respective publisher for "published" are accepted articles, studies, monographs, etc., which are accepted for printing in publications that own ISSN or ISBN.

4. Delinov, E., A. Stoyanova, I. Marasheva, On the suitability of Cloud Computing as an information aggregating environment from monitoring systems, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022

It will be published in IEEE Xplore, the conference has passed and there is a note – 6 points by coefficient 3 – a total of 18 points (if it is taken into account that it will be indexed in Scopus – the points are 10 by koif.  $3 = 30t.$ ). ISBN for XPLORE is 978-1-6654-8100-7. I refer to note 10. of the Final Provisions of the PPRB and I recognise 18 points.

5. Delinov, E., A. Stoyanova, I. Marasheva, An Approach for an Application of Cloud Computing in Testing Connectivity of Monitoring Systems, Proceedings

of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022

It will be published in IEEE Xplore, the conference has passed and there is a note – 6 points by coefficient 3 – a total of 18 points (if it is taken into account that it will be indexed in Scopus – the points are 10 by koif. 3 = 30t.) ISBN for XPLORE is 978-1-6654-8100-7. I refer to note 10. of the Final Provisions of the PPRB and I recognise 18 points.

6. Stoyanova, A., I. Marasheva, E. Delinov, Theorem of Minelai triangle and tetrahedron, University Publishing Houses "Paisii Hilendarski, Plovdiv, 2022", ISBN 978-619-202-761-2

Three chapters of a book that has been reviewed by two habilitated reviewers (professors) -15 points on 3 chapters - 45 points

7. Stoyanova, A., I. Marasheva, E. Delinov, Application of vectors for solving tasks in mathematics and physics, University Publishing Houses "Paisii Hilendarski, Plovdiv, 2022", ISBN 978-619-202-764-3

Four chapters of a book that was reviewed by two habilitated reviewers -15 points on 4 chapters - 60 points

The sum of all points in case we use the minimum points is 231 of the required 200.

For group of indicators E, the points are from quotes as follows:

Quoted title	Quoted in
Grapes, S., Yv. Marasheva-Delinova, E. Delinov, Sigma Mathematical Club in light of success project, Mathematics and Informatics, 2012, issue 5, p. 453-460, ISSN 1310-2230	Kirilova, B., Use of formal evaluation in homework, Mathematics and Informatics, 2015, 58, 3, p. 251-260 (Kirilova, B. Using formative assessment in homework. Mathematics and Informatics, 2015, 58, 3, pp.251-260)

The magazine is indexed in WoS – 2 points by factor 4 – a total of 8 points.

Delinov, E., Eskenazi, A., An Approach for a more Objective Evaluation of Practical Projects, Used in the Training Process, Serdica Journal of Computing, 8, Sofia, 2014, 409-431	Kyurkchiev, V., On a Modification of the Model of Phillips for Stabilization Control and Adequate Intervention of the Authorized Body Overseeing the Implementation of the Projects of the Operational Programme, Pliska Studia Mathematica Bulgarica, Vol. 25, No 1, (2015), pp105-110
---	---

The magazine is indexed in MathSciNet – 1 points by factor 4 – a total of 4 points.

<p>Grapes, S., Yv. Marasheva-Delinova, E. Delinov, Use of cloud technologies in the verification of projects for the acquisition of practical knowledge. Reports of the Forty-Second Spring Conference of the Union of Mathematicians in Bulgaria. Mathematics and Mathematical Education, Sofia: Union of Mathematicians in Bulgaria, 2013, 366-371</p>	<p>Shotlekov, I., D. Sharkova, The approach "Learners train learners in the cloud (04)" – first stage, Scientific Journal "Pedagogy", 2014. LXXXVI, vol. 86, p. 1. 4, 576-588 (Shotlekov, I., D. Charkova, The Learners Teach Learners in the Cloud Approach (Itlc) – Stage 1, Pedagogy, 2014, 86, 4, pp 576-588)</p>
--	---

The magazine is indexed in WoS – 2 points by factor 4 – a total of 8 points.

The following quotes will be published in IEEE Xplore, the conference has passed and there is a note – 1 point by coefficient 4 – a total of 4 points (if we mean it will be indexed in Scopus – the points are 2 by which 4 = 8t.). ISBN for XPLORE is 978-1-6654-8100-7. I refer to note 10. of the Final Provisions of the PPRB and I acknowledge 4 points for quote. Total 9 quotes or 36 t.

<p>E. Delinov, "Another point of view on cloud technologies," (in Bulgarian) Proceedings of the Eleventh National Conference with International Participation "Education and Research in the Information Society", June 1-2, 2018, Plovdiv, Association "Development of the information society", Sofia, 2018, pp281-290</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>E. Delinov and Iv. Marasheva, "The problems of the ICT infrastructure in the industrial objects – adaptation for students in economic majors," MASSEE International Congress on Mathematics MICOM 2009, Book of abstracts, 2009, Ohrid, p 26</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>E . Delinov and A. Eskenazi, "An approach for a more objective evaluation of practical projects, used in the training process," Serdica Journal of Computing, 8, Sofia, 2014, pp409-432</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>



<p>I. Marasheva-Delinova and E. Delinov, "Motivation of Students for Research Work Using Rotation Bodies Geometry," Proceedings of the 6th Mediterranean Conference on Mathematics Education, 2009, Plovdiv, Faculty of Mathematics and Informatics, Plovdiv University, pp 213-222</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>S. Grozdev, Iv. Marasheva-Delinova and E. Delinov, "Electronic library of students' projects in mathematics and information technologies," (in Bulgarian) Mathematics and Education in Mathematics, Proceedings of the Forty first Spring Conference of the Union of Bulgarian Mathematicians, Sofia, UBM, 2012, pp 325-329</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>S. Grozdev, Iv. Marasheva-Delinova and E. Delinov, "Cloud Technologies and Some Possibilities For Application In Education," (in Bulgarian) Mathematics and Informatics, 2013, issue 3, pp 239-257</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>E. Delinov and Iv. Marasheva-Delinova, "Application of cloud computing for the expansion of an electronic library of students projects," (in Bulgarian) Mathematics and Education in Mathematics, Proceedings of the Forty Fourth Spring Conference of the Union of Bulgarian Mathematicians, Sofia, UBM,, 2015, pp 327-334</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>
<p>S. Grozdev, Iv. Marasheva-Delinova and E. Delinov, "The Mathematical Club Sigma in the Light of the Project Success," (in Bulgarian) Mathematics and Informatics, 2012, issue 5, p. 453-460</p>	<p>Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022</p>

S. Grozdev, Iv. Marasheva-Delinova and E. Delinov, "Use of cloud technologies in the verification of projects for the formation of practical knowledge," (in Bulgarian) Mathematics and Education in Mathematics , Proceedings of the Forty Second Spring Conference of the Union of Bulgarian Mathematicians, Sofia, UBM, 2013, pp 366-372

Stoyanova, A., IoT, Cloud, Consumers, Challenges for Smart Appliance Manufacturers, Proceedings of the 13th NATIONAL CONFERENCE WITH INTERNATIONAL PARTICIPATION "ELECTRONICA 2022", Sofia, May 19-20, 2022

The sum of all points is 56 with 50 required.

All this proves that the candidate Dr. Emil Delinov fulfills (exceeds) all the requirements of Art. 24(1) of the Law for Development of the Academic Staff of RB.

#### **Short biographical data about the candidate.**

Dr. Emil Delinov was born on July 20, 1960. in the town of Haskovo. In 1984, he graduated from Paisii Hilendarski Polytechnic with a master's degree in "Mathematics with a specialization in Informatics". In 1995, he completed retraining in "Financial Management" at UNSS Sofia. In 2016, defended the ONS "Doctor" in Informatics, in the field of higher education 4. Natural sciences, mathematics and informatics, Professional direction 4.6. Informatics and Computer Sciences at the Institute of Mathematics and Informatics of the BAS under the leadership of Prof. Avram Eskenazi. He completed a number of specialized qualification courses in the fields of programming, applied software, technological hardware, physics and astronomy in Bulgaria, Hungary and Switzerland. Significant of them are those of the technological leaders Dell, IBM, SAP and in SZAMOK and CERN. He has consistently worked as a system programmer and head of department, assistant and senior assistant in "Mathematical assurance of computing machines and systems, research assistant and deputy. Director at SO "Software products and systems" (SPS, the first and largest corporation in Bulgaria, part of which are some of the largest global IT companies in Bulgaria, such as Stemo and Norma) - SK Haskovo (export oriented), was is the director and supervisor of ICT in various Bulgarian companies. With his participation and under his leadership, ICT projects for tens of millions are developed and implemented in large financial institutions (banks, insurance, pension and insurance companies), structures of central and local self-government, education and healthcare, industry and services, such as: Bulgarian National bank, Bank Deposit Guarantee Fund, Bulgarian Stock Exchange, Central Depository AD, SofiaBank, BZPB, Unionbank AD, Corporate Bank, Municipal Bank AD, CCB AD, ZPAD

Allianz Bulgaria, ZAD HDI, United Milk Company AD, Elektropradelenie Sofia-district, CEZ Bulgaria. He is currently the head of ICT at Teletek Electronics EAD, which is the largest Bulgarian manufacturer of a full range of signal-security and fire-alarm equipment and is in the top 30 in the world, as well as part of Comelit Group SpA.

He has participated in a number of scientific sessions, symposiums, seminars, international conferences, congresses and workshops in mathematics, informatics, information technology, economics, transport, as rapporteur and member of an organizational committee. For example: MASSEE International Congress on Mathematics MICOM 2009, 6th Mediterranean Conference on Mathematics Education, many Spring Conferences of the Union of Mathematicians in Bulgaria, and the 43rd as a member of the organizing committee.

### **General description of the presented materials of the competition.**

The candidate's expanded list of scientific papers includes 42 titles, including:

- 1 monograph,
- 2 books,
- 3 programming textbooks for students from the University of Education,
- 36 articles and reports published in scientific publications, referenced and indexed in world-renowned databases of scientific information and published in unreferenced journals with scientific review or published in edited collective volumes.

According to the presented author's report, Dr. Emil Delinov participated in the competition with nine scientific work. Including:

- one monograph [1],
- two books (with a total of 7 chapters , which he is an author and co-author) [8, 9]
- six articles, of which two are in Web of Science journals of Q4 [3, 4], two are in IEEE Xplore [5, 6], one in Zentralblatt MATH [2]
- one in an unindexed, but peer-reviewed is [7] (as required by PRAS at the Thracian University).

The reference submitted by Dr. Emil Delinov for the citations shows a total of 12 citations, 2 of which are at WoS bases, 9 are in IEEE Xplore and 1 are in MathSciNet. There are also those who are not represented for participation in the competition, since they are in publications and monographs that are not referenced and indexed in world-famous databases of scientific information.

The submitted materials for the competition do not repeat others used in the procedures for acquiring an educational and scientific degree "Doctor". I have not noticed plagiarism in the presented materials.

### **Scientific results and contributions.**

According to its content, the scientific papers submitted for participation in the competition can be classified in the following scientific fields:

- **Research of new information technologies and possible applications, with a positive result in different areas of economy, education, health, central and local government.**
- **Analyzing, designing and redesigning with optimization of technological and working (business) processes. Identify weaknesses, the risks associated with them and find ways to minimize them.**
- **Specification of needs for software solutions, design, modeling, development, implementation and accompanying of effective software products and systems.**
- **Methodological studies and proposals to improve the teaching, evaluation and efficiency of the learning process (mainly in mathematics, informatics and information technology), including project-based learning.**

**Investigating the Analytic Hierarchy Process (AHP) multi-criteria analysis method and proposing new aggregating dimensions for judgments and priorities, which, however, have not yet been published and I cannot present.**

In this direction, an analysis of the approaches and techniques developed to solve multi-criteria tasks has been carried out.

The following main contributions can be outlined in the five strands examined, which we can divide into approaches, models and methodology.

The reviewer accepts these contributions as formulated.

### **Auditor employment, participation in scientific projects and in organizing scientific forums**

From the submitted documents, it can be seen that the candidate has significant experience in teaching and other educational and scientific activities, as a teacher, assistant, senior assistant, research associate II and I degree and associate professor in various educational and scientific institutions: 1987-1990 - Assistant and Senior Assistant "Mathematical assurance of computing machines and systems (Programming and use of computing systems)" at VNV TU "Todor Kableshkov" - Sofia 1990-1990 - Research associate II degree at the Technological Institute of Chemical Engineering - Haskovo 1990-1991 - Research associate I degree in the SO "Software Products and Systems" (SPS) 1990-1991 - Honorary teacher of "Informatics" at PU "P. Hilendarski" - Haskovo branch 1991-1992 - Lecturer in "Informatics" at the Technical College of Economics - Haskovo 2000-2001 - Honorary lecturer in "Banking Information Technologies" at VINS - Varna 2001-

2018 - Ch. Assistant and Associate Professor of Informatics, IT in Economics and Data Analysis at the International Slavic Institute, Sofia. 1988-1989 - Member of the National Jury of the Student Olympiads in Programming 1990-1991 - Member of the Expert Council of the SO "Software Products and Systems" (SPS) - Sofia Scientific leader of pupils and students developing projects and participating in national and international scientific sessions, symposia, seminars, conferences and workshops in mathematics, informatics, information technologies, economics, transport. Scientific supervisor and reviewer of diploma theses of pupils and students. Co-author of 3 textbooks on "Programming" for students. Co-author of 3 books on mathematics. He participated in NIS projects at VNVTU. There are also accepted rationalizations and publications on joint developments with students from VNVTU. From the professional biography of the candidate, Dr. Emil Delinov, it can be seen that he is also an applied specialist in information and communication technologies. Automation rationalizations have been developed, adopted and implemented for regular operation. Author and developer of system and application software products implemented in various spheres of economy, finance, healthcare, education, transport: - one of the first warehouse management systems, - one of the first road transport management systems, - one of the first VAT reporting systems, - real-time data set system, - one of the first systems for Clinical Laboratory.

### **Critical notes.**

The very good organization and good quality of the applicant's materials, both in terms of content and layout, is impressive. The reviewer noticed only some minor technical inconsistencies and spelling errors. All this does not detract from the large volume of research, scientific and scientific practical work of the candidate, shaping him as an established scientist. The reviewer accepts the thus made distribution of the publications according to the five thematic directions presented by the candidate, although they flow into each other and no clear boundary can be drawn between them. It would be well to show the influence of these publications on more than one line, as seen in their reading. This would show the interaction of the presented thematic directions in their dynamics and outline the competition's theme in a more focused way. From the submitted documents, it can be seen that the candidate has already proven his ability to work in a team (participant in international, national and university projects and collectives, in nearly one fifth of them, as a leader).

## Conclusion

The requirements, conditions and criteria of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the LAW and the Regulations of the Thrace University, Stara Zagora and the Specific Requirements of the Faculty of Economics at Thrace University, Stara Zagora for occupying the academic position of Associate Professor have been fulfilled. and I give a categorically positive conclusion for the election of Dr. Emil Georgiev Delinov to the academic position of "Associate Professor" in the professional direction 4.6 Informatics and computer sciences.

Expressing a positive opinion on the presented materials, I propose to the honorable Scientific Jury to unanimously prepare a proposal to the Faculty Council, Faculty of Economics of Thrace University, Stara Zagora for the election of Dr. Emil Georgiev Delinov to the academic position of "Associate Professor" in the professional direction 4.6 Informatics and Computer Sciences.



Reviewer

Radoslav Yoshinov

03.08.2022