



# UNIVERSITATEA DE ȘTIINȚE AGRONOMICE ȘI MEDICINĂ VETERINARĂ – BUCUREȘTI



**The University of Agronomic Sciences and Veterinary Medicine of Bucharest** organizes a competition for 10 positions of **Scientific Research Assistant** within the scientific research contract PN-III-P1-1.2-PCCDI-2017-0134 Contract Nr. 23PCCDI din 16/04/2018, entitled “**Improvement of Life Quality by Developing New Technologies based on Efficient Nanoparticles in Water and Soil Decontamination**”, project leader Professor Gabriel Predoi, DVM, PhD, having the following characteristics:

- Workload: **8 hours/day** (full time)
- Employment period: **fixed-term, from 14.02.2019 until 15.10. 2020 (with the possibility of extending at least 2 years after the completion of the project PN-III-P1-1.2-PCCDI-2017-0134).**

### **Competition calendar:**

- 21.12.2018 – Publication of the announcement
- 21.12.2018 - 22.01.2019, 13:00 h – Submission of the required documents by the candidates
- 23.01.2019 – Publication of the list with the admitted candidates to the competition
- 25.01.2019, 09:00 h – Written test
- 25.01.2019, 15:30 h – Publication of the written test result
- 28.01.2019, 09:00 h – 14:00 h - Written test appeals submission
- 28.01.2019, 15:30 h – Publication of the written test appeal results
- 29.01.2019, 09:00 h – Candidates interview and dossier analysis
- 29.01.2019, 15:30 h – Publication of the results
- 30.01.2019, 09 :00 h – 14:00– Appeals submission
- 30.01.2019, 15:30 h – Publication of the appeal results
- 31.01.2019 – Publication of the final results

### **Competition dossier submission:**

University of Agronomic Sciences and Veterinary Medicine of Bucharest; Registry;  
Address: 59, Bd Mărăști, Bucharest, Romania.

**Competition venue:**

University of Agronomic Sciences and Veterinary Medicine of Bucharest

Address: 59, Bd Mărăști, Bucharest, Romania.

Time: According to the calendar

**Content of the application file:**

- List of the documents (Opis)
- Competition application form;
- Copies (if the case) of baccalaureate diplomas, bachelor's degree, master degree accompanied by the matriculation sheets, as well as other documents certifying specializations or certificate proving the quality of master programme / PhD programme student;
- Letter of intent;
- CV and List of published papers / List of practical applications and projects the candidate has attended;
- Copy ID and copy of the marriage certificate, if the case;
- Copy of work card / extract from the General Register of Employees Evidence with the signature and stamp of the employer / certificates regarding the performed activity, as the case may be.
- The criminal record or a declaration on his own responsibility that he has no criminal record to make him / her incompatible with the job he / she is applying for.
- Medical certificate attesting to the appropriate health status issued at least 6 months before the competition by the candidate's medic or by the competent health care units.
- Written declaration regarding the commitment of the candidate to fulfill the requirement to enroll in a doctoral studies programme within 2 years from the entry into force of the employment contract, if at the date of the competition he/she does not fulfill this condition.

**General conditions for employment:**

- full capacity to exercise the service;
- state of health appropriate to the position for which he / she is applying, certified on the basis of the medical certificate issued by the personal medic or authorized health care units;
- master programme student / master degree / PhD programme student in the fields of environmental engineering, veterinary medicine, physics, chemistry or related fields;
- graduate of a faculty profile:: environmental engineering, veterinary medicine, physics, chemistry or related fields;
- knowledge of operating PC (word, excel, power point) and specialized programs in the concerned field;
- oral and written communication skills both in Romanian and English/French;
- teamwork skills, communication skills, independent work;
- no work experience needed

### **Selection process:**

The competition will consist in a written test and an interview in the subject of the position.

The interview can only be supported by candidates who have obtained the minimum score of 8 on the written test.

The candidates who have obtained the minimum score of 8 are admitted to the interview. The final score is calculated as an arithmetic mean of the scores obtained at the written test and the interview and must be at least 8. The candidate who has obtained the highest score among the candidates who have competed for the same position is considered admitted, provided that those candidates have achieved the minimum score required.

## **THEMES AND BIBLIOGRAPHY**

### **Themes:**

1. The depollution capacity of new nanometer materials on contaminated waters and soils
2. The toxicological effects of some nanoparticles used in environmental applications
3. The use in agriculture of magnetic nanocomposites and their influence on the environment in the context of food safety strategies
4. National and European legislation in the field

### **Bibliography:**

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2. S.L. Iconaru, M.Motelica-Heino, R. Guegan, M.V. Predoi, A. M. Prodan, D.Predoi, 2018, *Removal of Zinc Ions Using Hydroxyapatite and Study of Ultrasound Behavior of Aqueous Media*, *Materials*, 11(8), 1350; <https://doi.org/10.3390/ma11081350>
3. M.P. Ferraz, F.J. Monteiro, C.M. Manuel, 2004, *Hydroxyapatite nanoparticles: A review of preparation methodologies*, *Journal of Applied Biomaterials & Biomechanics* 2, 74-80
4. M.H. Santos, M. de Oliveira, P. de Freitas Souza, H.S. Mansur, W.L.Vasconcelos, 2004, *Synthesis control and characterization of hydroxyapatite prepared by wet precipitation process*. *Mater Res.* 7(4), 625-630.
5. Z. Zhao, G. Jiang, R. Mao, 2014, *Effects of particle sizes of rock phosphate on immobilizing heavy metals in lead zinc mine soils*. *Journal of Soil Science and Plant Nutrition*, 14(2), 258–266.
6. Biswas, P. Wu, C. Y. ,2005, *Nanoparticles and the Environment*, *Critical Review Paper, Journal of the Air & Waste Management Association* 55, 708–746.

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13. T.P. Freeman, D.R. Shelton, J.M. Bjerke, K. Skierkowski, 1991, *The Ultrastructure of Wheat Gluten: Variations Related to Sample Preparation*, *Cereal Chem.* 68(5):492-498.
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16. R.M. Cornell, U. Schwertmann, 2003, *Iron Oxides* 2nd ed.
17. Legea 458/2002 privind calitatea apei potabile modificata si completata prin Legea 311/2004
18. Ordinul MAPM 1146/2002 pentru aprobarea Normativului privind obiectivele de referinta pentru clasificarea calitatii apelor de suprafata
19. Ordinul MMGA 161/2006 pentru aprobarea Normativului privind obiectivele de referinta pentru clasificarea calitatii apelor de suprafata in vederea stabilirii starii ecologice a corpurilor de apa
20. Normativ din 28.02.2002 privind stabilirea limitelor de incarcare cu poluanti a apelor uzate industriale si orasenesti la evacuarea in receptorii naturali NTPA – 001/2002 publicat in M. Of. Partea I nr. 187/2002
21. Ordinul MAPPM 756/1997 forma consolidata pentru aprobarea reglementarii privind evaluarea poluarii mediului
22. Ordonanța de urgență nr. 195/2005 privind protecția mediului

Additional informations can be obtained using the project web site:  
<http://icvdta.proiectecercetaredezvoltare.ro/>

Director proiect,

Prof. univ. Dr. Gabriel PREDOI