



University of Pannonia

EFOP-3.6.2-16-2017-00002

Research of autonomous vehicle systems related to the autonomous test track in Zalaegerszeg

The University of Pannonia, Veszprém, HU

announces a 1st Call for Applications for the

**Research of autonomous vehicle systems related to the autonomous test track in Zalaegerszeg**

**Research Scholarship Program**

in frame of project nr. EFOP-3.6.2-16-2017-00002

for International Researchers from EU/EGT member states and from the Carpathian Basin

2021

**CALL FOR APPLICATIONS**

**University of Pannonia**



HUNGARIAN  
GOVERNMENT

**SZÉCHENYI** 2020

**European Union**  
European Social  
Fund



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## 1. INTRODUCTION

In frame of project nr. EFOP-3.6.2-16-2017-00002 „Research of autonomous vehicle systems related to the autonomous test track in Zalaegerszeg” the University of Pannonia announces **Research Scholarship** for foreign tutors within the scholarship program. **Researchers** are expected from higher education to work in the research topic from EU/EGT member states as well from the Carpathian Basin within the scholarship program.

The objective of the program is to raise the number of researchers of higher education at the consortium members from EU/EGT member states as well from the Carpathian Basin. The scholarship program fosters to establish and raise the international embeddedness of the researches, to build international connections and to prepare the future common researches, applications and publications, furthermore, to strengthen the professional cooperation and networking amongst the consortia in the frame of the project.

## 2. APPLICATION FRAMES

### 2.1. PERIOD OF THE SCHOLARSHIP PROGRAM

The duration of the Foreign Tutors’ Research Scholarship program: **15th April, 2021 – 15th June, 2021. The grant period** is 2 months.

### 2.2. TARGET AUDIENCE

Tutors, researchers of higher education from EU/EGT member states and from the Carpathian Basin can apply for the scholarship.

### 2.3. AMOUNT OF GRANT

300.000 HUF/month



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### 3. TECHNICAL INFORMATION

- The grant is paid by the institute that announced the applied research topic according to its own institutional regulations and project instructions.
- All successful applicants are to sign a **scholarship contract** (titled Foreign Tutors' Research Scholarship Contract) with the University of Pannonia before the grant period starts.
- The scholarship provides the standard costs relating to the research activities (travelling, accommodation, catering), other allowances cannot be warranted to the same research activity nuisance to the project.
- The grant is transferred if the research activity is finished, after the submission and the acceptance of the **final report** against the certificate of accomplishment.

The location of execution:

University of Pannonia, Faculty of Engineering (UP-FE)	<b>Veszprém</b>
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### 4. Research topic

<b>Topic title</b>	<b>Leader of research</b>
Perspectives of additive manufacturing in the development of traction electrical machines for e-mobility enhancement	Dr. Dénes Fodor
<b>Description of the research activity</b> Additive manufacturing (3D printing) involves the fabrication of almost any part of an electrical machine by depositing material layer-by-layer. This technology differs basically from the conventional processes such as subtractive, formative, and joining processes. By applying it, diverse new design perspectives were opened also for the electrical machines used in traction drives and e-mobility. As regarding the used materials, more and better quality materials can be applied, the complexity of the machine structures can be improved, a single part can be manufactured of diverse materials resulting in significant weight savings, and the material properties can be more easily controlled. As concerning the new fabrication technologies, high-level modularization can be enabled, thinner layer thickness and higher accuracies can be achieved.	





Due to all of these, additive manufacturing in the field of electrical machines has received nowadays remarkable attention.

Considering a visiting research position the possibility of applying this new technology must be surveyed for several electrical machines types and their advantages are emphasized over the classical constructions and their manufacturing. The investigation must be concluded in a research paper.

## 5. APPLICATION

Applications are to be submitted electronically to the assigned professional leader of the University of Pannonia until the dedicated deadline.

### 5.1. APPLICATION DOCUMENTATION

- Signed and scanned application form (based on the project template)
- CV,
- List of publications,
- Signed and scanned research plan (based on the project template) that contains:
  - connection of the project activity, the chosen research topic and the own research field,
  - suggestion for the possibilities of the scientific cooperation,
  - a short recommendation for the possibilities of research cooperation and the international connections,
  - the form of joining the project and its expected outcomes
- syllabus of the master course, if relevant
- topics of personal consultation, if relevant

### 5.2. APPLICATION DEADLINE: **14:00 Thursday 14<sup>th</sup> April 2021.**

### 5.3. INSTITUTIONAL RESPONSIBLE OF THE SCHOLARSHIP

(Please send the application documentation to the professional leader and the institutional responsible on the score of the chosen topic within the above mentioned deadline!)

University of Pannonia	Gabriella Ihász	<a href="mailto:ihaszg@almos.uni-pannon.hu">ihaszg@almos.uni-pannon.hu</a>
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#### 5.4. EVALUATION CRITERIA

Applications are evaluated by the assigned professional leader and the research topic leader of the University of Pannonia about which an evaluation report is made. Notification to applicants will be sent electronically by 15th April, 2021.

#### 5.5. OTHER CONTACTS

University of Pannonia, Egyetem utca 10. Veszprém 8200

Professional leader: Dr. Dénes Fodor, University of Pannonia, [fodor@almos.uni-pannon.hu](mailto:fodor@almos.uni-pannon.hu)

For further information contact the institutional responsible of the scholarship of the project, Gabriella Ihász, [ihaszg@almos.uni-pannon.hu](mailto:ihaszg@almos.uni-pannon.hu)

Website: <http://www.mk.uni-pannon.hu/index.php/cimlap/hirek-es-esemenyek/90-palyazatok-oesztoendijak>



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