DESCRIPTION OF INFORMATION ON AUTHORIZATION TO CONDUCT HABILITATION PROCEEDING AND INAUGUATION PROCEEDING

Name of the higher education institution: Alexander Dubček University of Trenčín Address of the higher education institution: Študentská 2, 911 50 Trenčín Identification number of the higher education institution: 719000000 Name of the workplace: Centre for Functional and Surface Functionalized Glass Address of the workplace: Študentská 2, 911 50 Trenčín

Institution body for approving the habilitation proceeding and inauguration proceeding: Committee for the internal evaluation TnUAD Date of the approval or the modification of the habilitation proceeding or inauguration proceeding: 18.8.2022 Reference to the results of the latest periodic review of the habilitation proceeding or inauguration proceeding: <u>https://tnuni.sk/univerzita/organy-univerzity/rada-pre-vnutorne-hodnotenie-</u> <u>tnuad/?L=phqltdlacbkuubmn</u>

1. Definition of the field of habilitation proceeding and inauguration proceeding

- Name of the field in habilitation proceeding and inauguration proceeding: Inorganic technology and materials
- Content definition:

Content definition of the field of habilitation proceeding and inauguration proceeding in Inorganic technology and materials is in direct connection with the study field of Chemical Engineering and Technologies to which it is assigned and implements the study program in III. degree in Inorganic technologies and non-metallic materials. The university-wide workplace - FunGlass carries out continuous creative activities in the field of habilitation proceeding and inauguration proceeding in Inorganic technology and materials. The focal areas in the field of habilitation and inauguration proceedings are primarily focused on basic and applied research in the field of glass and advanced ceramic materials and can be defined as follows:

• The field of glass materials with a focus on:

- investigation of the relationships between the properties of glass and their composition, supported by thermodynamic modeling,

- development of new types of glass according to the requirements of practice,

- investigation of the corrosion mechanism of the surface of commercially produced glass for the needs of the glass industry, and the mechanism of corrosion and radiation resistance of glass fibers (as insulation) for the needs of the nuclear industry, in order to increase their corrosion resistance,

- investigation of the corrosion mechanism of refractory materials for the needs of the glass industry, - research and development in the field of new approaches to the melting of commercially produced

glasses,

- exploring the possibility of recycling glass waste,

- investigation of the effect of chemical and physical treatment of glass surfaces on the mechanical properties of glass,

- research in the field of sol-gel methods (thin films, composites) for biomedical (antibacterial coatings, anticorrosion coatings), optical and optoelectronic applications (reflective and anti-reflective coatings, luminescent active coatings),

- advanced manufacturing (3D, 2D printing),
- bioactive glasses and composite materials.
 - The field of ceramic and inorganic materials with a focus on:

- research in the field of advanced ceramic materials, investigation of the relationships between microstructure and mechanical and optical properties, photoluminescently active ceramic materials, transparent ceramic materials,

- transparent oxyfluoride glass-ceramic materials with luminescently active fluoride nanophases,

- preparation and characterization of glass-ceramic coatings for high-temperature corrosion protection of metallic materials,

- preparation and study of photocatalytically active inorganic materials and composites for degradation of organic pollutants and hydrogen technology (water splitting).

- Awarded degree: doc./prof.
- Assignment to field(s) of study: 16. Chemical engineering and technology
- 2. Personnel responsible for the study field of the habilitation proceeding and inauguration proceeding
- Persons responsible for the habilitation proceeding and inauguration proceeding
- prof. Ing. Dušan Galusek, DrSc.
- Dr. h.c. prof. Ing. Marek Liška, DrSc.
- doc. Ing. Róbert Klement, PhD.
- doc. Ing. Mária Chromčíková, PhD.
- doc. Amirhossein Pakseresht, Ph.D

Each of these persons is responsible for development and quality assurance in only one study field of the habilitation proceeding and the inauguration proceeding and only at one university in the Slovak Republic or abroad.

Reference to the research/art/teacher profiles of the persons responsible for the habilitation proceeding and inauguration proceeding:

VUPCH persons responsible for habilitation proceeding and inauguration proceeding

 Personnel of the Scientific Board in Alexander Dubček University of Trenčín Reference to the personnel of the Scientific Board of the university: <u>https://tnuni.sk/univerzita/organy-univerzity/vedecka-rada/?L=\%271</u>

Reference to the personnel of the Scientific Board of the faculty: The Centre for Functional and Surface Functionalized Glass (FunGlass) is a university-wide research facility and as such does not have its own Scientific Board. In the relevant issues, it is a subject to the decisions of the Scientific Board in TnUAD.

- Outputs of the characteristics of the submitted research/artistic/ other output of persons responsible for habilitation proceeding and inauguration proceeding: Reference to the characteristics of the submitted research/artistic/other output:
- 3. Level of criteria for evaluating the fulfillment of conditions for obtaining the degree of an associate professor
- Current criteria for obtaining the degree of an associate professor

Reference to the current criteria: Minimum Criteria for Obtaining the Title of Asssociate Professor and the Title of Professor

Criteria are published on the website of the Funglass: <u>https://www.funglass.eu/habilitations-and-innaugurations/</u>

Criteria valid from: 18.8.2022

 Previous version of the criteria for obtaining the degree of an associate professor Reference to the previous version with validity: <u>Dalsie relevantne dokumenty</u>

Criteria are published on the website of the Funglass: <u>https://www.funglass.eu/habilitations-and-innaugurations/</u>

Criteria valid until: 17.8.2022

- 4. Level of criteria for evaluating the fulfillment of the conditions for obtaining the degree of a professor
- Current criteria for obtaining the degree of a professor

Reference to the current criteria: <u>Minimum Criteria for Obtaining the Title of Associate Professor and the Title of Professor</u>

Criteria are published on the website of the Funglass: <u>https://www.funglass.eu/habilitations-and-innaugurations/</u>

Criteria valid from: 18.8.2022

- Previous version of the criteria for obtaining the degree of a professor <u>Dalsie relevantne dokumenty</u>

Criteria are published on the website of the Funglass <u>https://www.funglass.eu/habilitations-and-innaugurations/</u>

Criteria valid until: 17.8.2022

5. Rules and procedures of habilitation proceeding and inauguration proceeding The habilitation proceeding and the inauguration proceeding are carried out according to:

The rules and procedures of the habilitation proceeding and the inauguration proceeding are written down in the university-wide directive 3-U-054 – Organizational directive on the procedure for obtaining scientific-pedagogical degrees and art-pedagogical degrees docent and professor at TnUAD

Reference on the Directive:

https://www.funglass.eu/habilitations-and-innaugurations/

246 Decree of the Ministry of Education, Science, Research and Sports of the Slovak Republic of 22 July 2019 on the procedure for obtaining scientific-pedagogical degrees and artistic-pedagogical titles Associate Professor and Professor.

Decree reference:

https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2019/246/

6. Completed proceedings and their results

Name of the habilitation candidate	The end date of the HP	Result of the HP
doc. Ing. Róbert Klement, PhD.	29.11.2018	Resolution of the SB TnUAD- 2/2 / 2018- approval of the proposal for the title of associate professor in the field of Inorganic Technology and Materials
doc. Ing. Mária Chromčíková, PhD.	29.11.2018	Resolution of the SB TnUAD- 2/2 / 2018- approval of the proposal for the title of associate professor in the field of Inorganic Technology and Materials
doc. Amirhossein Pakseresht, Ph.D	16.12.2021	Resolution of the SB TnUAD- 3/2/2021- approval of the proposal for the title of associate professor in the field of Inorganic Technology and Materials
doc. José Joaquín Velázquez García, PhD.	26.5.2022	Resolution of the SB TnUAD- 2/1/2022- approval of the proposal for the title of associate professor in the field of Inorganic Technology and Materials

Habilitation proceedings:

Inauguration proceedings:

There was no inauguration proceeding at the Centre for Functional and Surface Functionalized Glass.

Reference to the closed proceedings and their results: <u>https://tnuni.sk/habilitacie-a-inauguracie/</u>

7. Ongoing proceedings

There are currently no habilitation proceedings nor inauguration proceedings at the workplace.

Reference to the ongoing proceedings and their results: <u>https://tnuni.sk/habilitacie-a-inauguracie/</u>