Application form for research topics in the field of the arts for candidates to the Doctoral School in the academic year 2025/2026

Proposed subject matter of a doctorate

Searching for aesthetic and structural solutions in lighting elements used in the infrastructure of cities or villages

Scientific discipline

FINE ARTS AND ART CONSERVATION

Proposed doctoral thesis supervisor

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Brief description of the research topics with an indication of the scientific issues (max. 350 words)

The research topics concern the search for forms of lighting used in public spaces. The research may concern structures, mounting systems, innovations in the use of specific fluxes, color and power of light, as well as the materials used and their combinations. Depending on the specific design problem, the topics may concern small, medium or large objects such as elements of city infrastructure - urban furniture, small architecture or lighting of sports fields, sports halls, streets, sidewalks or park alleys. The research may take on a multidisciplinary nature - characteristic of the area of design.

Justification of the purposefulness of taking up the research topics (max. 150 words)

The changing infrastructure of cities and villages requires functional and aesthetic adaptation of the elements found therein, including lighting elements. All public utility places require a specific type of lighting adapted to a wide range of users, including people with disabilities or minors.

Proposed topics of doctoral theses within the proposed research subject matter (up to 3 topics)

- 1. LED lighting fixtures with passive cooling designed for large outdoor and indoor spaces.
- 2. A street lighting system for a selected city created based on a specific stylistic imperative.
- 3. A garden lighting system using unconventional materials in the spirit of sustainable design.

The sources of financing of the research topics (the subject matter of currently implemented research grants financed from external sources or as part of subsidies)

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Confirmation of the possibility of ensuring access to scientific apparatus and software necessary for the realization of the proposed research topics

FULLY

If the answer is PARTIALLY or NONE please indicate a type of missing scientific apparatus and/or software and the sources of financing an access to them

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List of the supervisor's scientific achievements in the field of indicated scientific problems

A list of up to 5 major supervisor's publications related to the proposed research topics, published in journals indexed in the Web of Science or Scopus and/or authorship of publication / editing / or authorship of a chapter in the field of fine arts and art conservation, scientific monographs and other activities in the represented field - for the period of the last 8 years (taking into account the journal's or work's IF Impact Factor and the MNiSW score)

- chapter in the scientific monograph "Languages of Design. Paradigms of Design Spaces" ISBN:978-83-7365-379-5

A list of research grants financed by the National Centre for Culture, the Ministry of Culture and National Heritage of the Republic of Poland, the National Science Centre, the National Centre of Research and Development and the European Research Council for the period of the last 5 years

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A list of research services carried out for industry and related to the proposed research topics for the period of the last 8 years and/or creative achievements and scientific and research projects, design or artistic achievements in the field of fine arts and art conservation (individual exhibitions, original art works, works in the field of design arts, participation in collective exhibitions in renowned galleries, awards and prizes in competitions, implementations and patents, participation in the jury of a competition or a festival, acting as an exhibition curator

- 1. LED ROAD MASTER lamp project energy-saving street lamp for Lumi Team Sp. z o.o.
- 2. Tubio LED lamp family project for Imperial sp. z o.o..
- 3. HB LED Square lamp project for Lumi Team Sp. z o.o.; Production technology cast aluminum.
- 4. LED Slim lamp project for Lumi Team Sp. z o.o.
- 5. Giotto floor lamp project for Dar Lighting UK