

LIST OF DISSERTATIONS TOPICS FOR DOCTORAL STUDIES COURSES IN 2019

TECHNOLOGICAL SCIENCES

| Scientific areas | Topics of doctoral dissertations | Supervisors |
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| CHEMISTRY ENGINEERING – T 005 | 1. Development of bio-sensory systems for biomarkers of Alzheimer's disease | Dr. Aurelijus Burokas |
| | 2. Investigation of transglutaminase gene expression and development of it's application | Dr. Inga Matijošytė |
| | 3. Synthetic biology tools for the production of recombinant biopharmaceuticals in yeast | Dr. Rasa Petraitytė-Burneikienė |
| | 4. Understanding inhibition of protein amyloid fibril formation | Dr. Vytautas Smirnovas |
| | 5. Development of methods for expression and purification of amyloid-forming proteins and peptides | Dr. Vytautas Smirnovas |
| INFORMATICS ENGINEERING – T 007 | 1. Computer-based systems modelling and optimisation | Prof. Tadas Meškauskas Doc. Saulius Minkevičius Prof. Darius Plikynas Prof. Leonidas Sakalauskas |
| | 2. Cyber-physical-social systems engineering | Prof. Dalė Dzemydienė Prof. Saulius Gudas Prof. Audrius Lopata Prof. Olegas Vasilecas |
| | 3. Computer-assisted teaching and learning | Prof. Valentina Dagienė Doc. Jevgenij Kurilov |
| | 4. Parallel and distributed computing | Doc. Algirdas Lančinskas Dr. Remigijus Paulavičius Prof. Julius Žilinskas |
| | 5. Computational intelligence in economics, medicine, and other domains | Prof. Gintautas Dzemyda Prof. Audronė Jakaitienė |

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| | | Prof. Olga Kurasova Doc. Saulius Masteika Prof. Tadas Meškauskas Doc. Aistis Raudys Prof. Julius Žilinskas |
| | 6. Block chain technologies and cybersecurity | Doc. Igoris Belovas Doc. Ernestas Filatovas Dr. Remigijus Paulavičius Dr. Virginijus Marcinkevičius Doc. Saulius Masteika Dr. Viktor Medvedev |
| | 7. Artificial intelligence-based image, audio and streaming data processing technologies | Dr. Jolita Bernatavičienė Dr. Gražina Korvel Dr. Virginijus Marcinkevičius Doc. Gintautas Tamulevičius Doc. Povilas Treigys |
| | 8. Algorithms and data analysis in bioinformatics | Prof. Audronė Jakaitienė Prof. Julius Žilinskas |
| | 9. Cognitive computing technologies: artificial intelligence, deep learning, big data, classification, recognition | Prof. Gintautas Dzemyda Prof. Olga Kurasova Dr. Viktor Medvedev |
| | 10. Machine learning and natural language processing | Dr. Gražina Korvel Dr. Virginijus Marcinkevičius Doc. Aistis Raudys |
| MATERIALS ENGINEERING – T 008 | 1. Technologies of high energy radiation dosimetry for applications in physics and medicine | Habil. dr. Eugenijus Gaubas |
| | 2. Charge carriers transport and recombination studies in disordered materials and their application in optoelectronic devices | Dr. Kristijonas Genevičius |
| | 3. Study of photopolymerization rate and localization by varying exposure and ambient parameters | Dr. Mangirdas Malinauskas |
| | 4. Fabrication of free-form functional microstructures from transparent materials with femtosecond laser assisted selective etching | Prof. Valdas Sirutkaitis |