

Assist. Prof.
Şeyma TAŞDEMİR

Education Information

PhD
2019
Ege University
Biyomühendislik

Master
2013
Ege University
Biyomühendislik

Bachelor's
2010
Ege University
Biyomühendislik

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Research Topics

- Tissue engineering
- Biocompatibility tests
- *In vitro* disease models
- Neurodegenerative diseases
- Neuroregeneration
- Stem cells
- Biomaterials
- Nanomaterials

Collaborations

- IKÇÜ, Faculty of Pharmacy Pharmaceutical Chem
- Ege University, Mechanical Engineering
- Ege University, Bioengineering
- MCBU, Faculty of Medicine, Physiology
- MCBU, Vocational School of Health

Publications

1. Erden Tayhan S, **Taşdemir Ş**, Deliloğlu Gürhan İ, Mir E. Comparison for osteogenic differentiation capacity of adipose tissue derived mesenchymal stem cells from humans and rats. Turkish Journal of Biology. 2016;40:5. https://doi.org/10.3906/biy-1507-128
2. Cesur S, Küçükgöksel Y, Taşdemir Ş, Şendemir Ürkmez A. Polycaprolactone-hydroxy apatite composites for tissue engineering applications. Journal of Vinyl & Additive Technology. 2018;24(3):248-261. https://doi.org/10.1002/vnl.21569
3. Morçimen ZG, **Taşdemir Ş**, Erdem Ç, Güneş F, Şendemir A. Investigation of the adherence and proliferation characteristics of SH-SY5Y neuron model cells on graphene foam surfaces. Materials Today:Proceedings. 2019;19:40–46. (Tam metin bildiri).

You can access the other publication from here.

Project Experience

1. Evaluation of Neuroregenerative Effects of New Hydroxypyridinone Derivatives on Alzheimer's Disease Models (TÜBİTAK 1001, 2022-present, Researcher)
2. Development of a 3D Printed Thermoelectric Power Generation System for Implanted Medical Devices (TÜBİTAK 1001, 2021-present, Researcher)
3. Investigation of the potential of microalgae-containing novel biochemobionic material as bone tissue scaffold (TÜBİTAK 1002, 2021-2022, Researcher)

You can access the other projects from here.

Analysis and Tests

- ✓ **Extract Test/ MTT Test**
  In vitro biocompatibility testing performed according to ISO10993 standards
- ✓ **Direct/Indirect Contact Tests**
  In vitro biocompatibility testing performed according to ISO10993 standards
- ✓ **Genotoxicity Tests**
  In vitro biocompatibility testing performed according to ISO10993 standards
- ✓ **Tissue Scaffold Productions**
- ✓ **Cell adhesion and proliferation tests**
- ✓ **Development of 2D and 3D in vitro disease models**
- ✓ **In vivo studies**
  Especially Parkinson's and Alzheimer's disease models and treatment studies