

Asst. Prof. Buket BAKAN

Personal Information

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International Researcher IDs

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Education Information

Post Doctorate, Institute for Medical Research and Occupational Health, Analytical Toxicology and Mineral Metabolism Unit, Croatia 2022 - Continues

Doctorate, Ege University, Fen Bilimleri Enstitüsü, Turkey 2013 - 2019

Certificates, Courses and Trainings

Quality Management, GLP Course, VISION, 2022

Other, EuroNano Forum, Portugal.EU, 2021

Vocational Training, Contemporary Refinement Research, its Application in Practice, and Future Directions, Johns Hopkins Center for Alternatives to Animal Testing (CAAT), 2021

Vocational Training, Nanosafety/Econanotoxicity and Regulatory Aspects of Nanoproducs, The Energy and Resources Institute, 2021

Vocational Course, Chemical Security Fundamentals Training/ Kimyasal Güvenliđinin Temelleri Eđitimi, Lawrence Livermore Ulusal Laboratuvarları (LLNL)-Türk Toksikoloji Derneđi, 2020

Vocational Training, Good Laboratory Practice (GLP)-İyi Laboratuvar Uygulamaları Eđitimi (ILU), Türk Akreditasyon Kurumu (TÜRKAK), 2020

Vocational Course, 22. Ege Onkoloji Günleri, Onkolojide Yeni Tedavi Arayışları Sempozyumu, Onkoloji Kursu, Ege Üniversitesi, 2020

Vocational Training, Laboratory Animal Science Certificate/ FELASA B, KU Leuven University, 2018

Vocational Course, Protein Kromatografisi ve Yeni Nesil Polimerik Sistemler, Hacettepe Üniversitesi, 2016

Quality Management, TS EN ISO: IEC 17025-2012 Deney/Kalibrasyon Laboratuvarları için Genel Şartlar Eđitimi, Türkak, 2016

Vocational Course, "In vivo Imaging" Uygulamalı Kanseri Görüntüleme Kursu, Ege Üniversitesi, 2015

Vocational Course, Deney Hayvanları Kullanım Sertifikası, Yeditepe Üniversitesi, 2015

Vocational Course, İleri Yaşam Bilimleri Kursu, Bursa Uludağ Üniversitesi, 2014

Research Areas

Life Sciences, Biotechnology, Biomaterial, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Ataturk University, Fen Fakültesi, Moleküler Biyoloji ve Genetik, 2020 - Continues
Researcher, Katholieke Universiteit Leuven, 2018 - 2019

Academic and Administrative Experience

Birim Stratejik Plan Komisyonu Üyesi, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - Continues
Bölüm Tanıtım ve Mezunlarla İlişkiler Komisyonu Üyesi, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - Continues
Bölüm Stratejik Plan Komisyonu Üyesi, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - Continues
Bölüm Kalite Komisyonu Üyesi, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - Continues
Anabilim Dalı Akademik Kurul Üyesi, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - 2022
Deputy Head of Department, Ataturk University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2021 - 2022

Jury Memberships

Post Graduate, Post Graduate, Erzurum Teknik Üniversitesi, December, 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Science-based evidence on pathways and effects of human exposure to micro- and nanoplastics**
Bakan B.
ARHIV ZA HIGIJENU RADA I TOKSIKOLOGIJU, vol.75, pp.1-14, 2024 (SCI-Expanded)
- II. **Receptor mediated targeting of EGF-conjugated alginate-PAMAM nanoparticles to lung adenocarcinoma: 2D/3D in vitro and in vivo evaluation.**
Ilhan-Ayisigi E., Saglam-Metiner P., Sancı E., Bakan B., Yildirim Y., Buhur A., Yavasoglu A., Yavasoglu N. U. K., Yesil-Celiktas O.
International journal of biological macromolecules, vol.261, no.Pt 1, pp.129758, 2024 (SCI-Expanded)
- III. **Impact of a Polymer-Based Nanoparticle with Formoterol Drug as Nanocarrier System In Vitro and in an Experimental Asthmatic Model**
Bakan B.
TOXICS, vol.11, no.974, pp.1-15, 2023 (SCI-Expanded)
- IV. **L-glutamic acid-g-poly hydroxyethyl methacrylate nanoparticles: acute and sub-acute toxicity and biodistribution potential in mice**
BAKAN B., OLTULU F., YILDIRIM Y., YAVAŞOĞLU A., AKGÖL S., KARABAY YAVAŞOĞLU N. Ü.
ARHIV ZA HIGIJENU RADA I TOKSIKOLOGIJU-ARCHIVES OF INDUSTRIAL HYGIENE AND TOXICOLOGY, vol.74, no.3, pp.207-217, 2023 (SCI-Expanded)
- V. **Preparation of a Tc-99m-labeled graft polymer and its in vitro and in vivo evaluation**
Avcibasi U., Turkyarar T., Karadag A., Bakan B., Yavasoglu N. U. K., Kusat K., AKGÖL S., GÜLCEMAL D., Tekin V., BİBER MÜFTÜLER F. Z., et al.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.329, pp.511-525, 2021 (SCI-Expanded)
- VI. **Acute and chronic exposure to air pollution in relation with incidence, prevalence, severity and mortality of COVID-19: a rapid systematic review.**
Katoto P. D. M. C., Brand A. S., Bakan B., Obadia P. M., Kuhangana C., Kayembe-Kitenge T., Kitenge J. P., Nkulu C. B. L., Vanoirbeek J., Nawrot T. S., et al.
Environmental health : a global access science source, vol.20, pp.41, 2021 (SCI-Expanded)
- VII. **Synthesis, characterization and toxicity assessment of a new polymeric nanoparticle, L-glutamic acid-g-p(HEMA)**
Bakan B., GÜLCEMAL S., AKGÖL S., Hoet P. H. M., Yavasoglu N. U. K.

CHEMICO-BIOLOGICAL INTERACTIONS, vol.315, 2020 (SCI-Expanded)

- VIII. **Synthesis, characterization, toxicity and in vivo imaging of lysine graft polymeric nanoparticles**
Bakan B., Kayhan C. T., Karayildirim C. K., DAĞDEVİREN M., GÜLCEMAL S., YILDIRIM Y., AKGÖL S., Yavasoglu N. U. K.
JOURNAL OF POLYMER RESEARCH, vol.26, no.10, 2019 (SCI-Expanded)
- IX. **Deciphering the biochemical similarities and differences among mouse embryonic stem cells, somatic and cancer cells using ATR-FTIR spectroscopy**
Guler G., Acikgoz E., Yavasoglu N. U. K., Bakan B., Goormaghtigh E., AKTUĞ H.
ANALYST, vol.143, no.7, pp.1624-1634, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Cytotoxicity and genotoxicity evaluations of oleic acid and conjugated linoleic acid**
Kizilsahin S., KÖKSAL KARAYILDIRIM Ç., BAKAN B., NALBANTSOY A., KARABAY YAVAŞOĞLU N. Ü.
ISTANBUL JOURNAL OF PHARMACY, vol.52, no.1, pp.14-19, 2022 (ESCI)
- II. **Graphosoma (Graphosomella) inexpectatum, a new record for the fauna of Turkey (Hemiptera, Pentatomidae, Podopinae).**
Bakan N. B., Koçak M. K.
Cesa News, vol.85, pp.1-7, 2013 (Peer-Reviewed Journal)
- III. **Cerocoma festiva in Van Province of East Turkey (Meloidae, Coleoptera).**
Bakan N. B., Koçak M. K., Koçak A. Ö.
Cesa News, vol.83, pp.4-7, 2012 (Peer-Reviewed Journal)
- IV. **Oxycarenus pallens (H.-S.) in Van Province (East Turkey) (Hemiptera, Lygaeidae)**
Bakan B., Koçak M. K.
Cesa News, vol.85, pp.1-5, 2011 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Toxicity of Nanomaterials**
Bakan N. B., Karabay Yavaşoğlu N. Ü.
in: NANOMATERIALS: FUNDAMENTALS AND APPLICATIONS, Sinan AKGÖL, Editor, Palme Yayın Dağıtım, Ankara, pp.151-181, 2018
- II. **Environmental and Health Effects of Nanomaterials.**
Bakan N. B., Karabay Yavaşoğlu N. Ü.
in: Nanomaterials: Fundamentals and Applications, Sinan Akgöl, Editor, Palme Yayın Dağıtım, Ankara, pp.163-181, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **IN VIVO EFFICACY TESTING OF NANODRUGS FOR PARKINSON'S DISEASE TREATMENT**
Bakan B.
INTERNATIONAL CONFERENCE RECENT ACHIEVEMENTS IN NANOTECHNOLOGY 10TH ANNIVERSARY OF BIONANOTECHNO CENTER UNIVERSITY OF BIAŁYSTOK, Białystok, Poland, 28 - 31 May 2023, pp.46
- II. **Preparation And In Vitro Evaluation Of L-Lysine Grafted PHEMA Membranes For Potential Use As Drug Delivery Systems**
Bakan B., Aksu D., Kuşat K., Akgöl S., Karabay Yavaşoğlu N. Ü.
KOMPEGE, Antalya, Turkey, 4 - 06 November 2021, pp.1-2
- III. **Dual Drug Loaded Solid Lipid Nanoparticles for Glioblastoma Therapy via Intranasal Route: Toxicological and Pharmacokinetic Studies**

Ak G., Bakan N. B., Karabay Yavařođlu N. Ü., řanlıer ř.

International Joint Science Congress of Materials and Polymers, Priřtine, Kosovo, 12 - 14 September 2019, pp.1-2

IV. In vitro toxic effects of L-glutamic acid-g-p(HEMA) polymeric nanoparticle

Bakan N. B., Gülcemal S., Akgöl S., Hoet P., Karabay Yavařođlu N. Ü.

54th Congress of the European-Societies-of-Toxicology (EUROTOX) , Brussels, Belgium, 2 - 05 September 2018, vol.295, pp.210-211

V. In Vivo Evaluation of Magnetic Targeted and Ultrasound Mediated Nanobubble System For Iv Injection and/or Inhaler Application For Use In Lung Cancer Treatment In Tumor Bearing Mice

řanlıer ř., Ak G., Bakan N. B., Karabay Yavařođlu N. Ü.

The Second Japan-Turkey International Symposium on Pharmaceutical and Biomedical Sciences, Trabzon, Turkey, 11 - 12 September 2017, pp.1-2

VI. Determination of the Effect of Polymeric Nanoparticle in Biological Samples with ATR-FTIR Spectroscopy

Bakan N. B.

, 3rd International Turkish Congress on Molecular Spectroscopy (TURCMOS2017), Muđla, Turkey, 26 - 27 August 2017, pp.140-141

VII. In vivo imaging and safety evaluation of Lys-graft-p (HEMA) nanoparticle as drug delivery system

Bakan B., Kayhan C. T., Ural F. Z., DAĐDEVİREN M., Karayıldırım C. K., YILDIRIM Y., AKGÖL S., Yavasoglu N. U. K.

41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.135

Other Publications

I. ADDRESSING OVERLAPPING INFODEMICS: THE AIR POLLUTION-COVID-19 NEXUS

Katoto P. D., Brand A. S., Bakan B.

Other, pp.1-2, 2021

Supported Projects

BAKAN B., GÜNGÖR S., AYGÜN E., řİřECİOĐLU M., Project Supported by Higher Education Institutions, Alüminyum oksit nanopartiküller üzerine L-glutaminaz enzimin immobilizasyonu, 2023 - 2023

BAKAN B., Project Supported by Higher Education Institutions, Farklı boyutlara sahip Alüminyum Oksit (Al₂O₃) nanopartiküllerin hemolitik aktivitesi ve irritant etkisinin ortaya konulması, 2022 - 2023

Patent

Bakan N. B., KERSETİN İLE BASKILANMIř POLİMER MALZEME, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 201515952 , Standard Registration, 2018

Memberships / Tasks in Scientific Organizations

Atatürk Üniversitesi, Uluslararasılařma ve Dijitalleşme Birim Komisyonu, Member, 2021 - Continues, Turkey

Klinik dıřı Arařtırmalar Deđerlendirme Kurulu, Member of Science Committee, 2021 - Continues, Turkey

Atatürk Üniversitesi, Akreditasyon Komisyonu, Member, 2021 - Continues, Turkey

Türk Toksikoloji Derneđi, Member, 2019 - Continues, Turkey

Scientific Refereeing

Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Ataturk University, Turkey, June 2021

Tasks In Event Organizations

Bakan B., World Congress on Applied Nanotechnology (WCAN 2021), Scientific Congress, Erzurum, Turkey, Kasım 2021
Kalecik S., Sarıtaş S., Kılıç D., Ünver Y., Nişancı B., Toraman E., Ömeroğlu M. A., Orak T., Taş S., Levet A., et al., 1st International Symposium On Recent Advances In Fundamental And Applied Sciences (Isfas-2021), Scientific Congress, Erzurum, Turkey, Eylül 2021

Metrics

Publication: 23

Citation (WoS): 75

Citation (Scopus): 86

H-Index (WoS): 5

H-Index (Scopus): 5

Congress and Symposium Activities

SINERGY AT THE CHEMISTRY-NANOTECHNOLOGY INTERFACE 2023, Attendee, Zagreb, Croatia, 2023

Nano2Clinic-Synergies for Clinical Translation of nanotechnology in Cancer Therapies, Audience, Zagreb, Croatia, 2023

World Congress on Applied Nanotechnology (W-CAN), Session Moderator, Erzurum, Turkey, 2021

V. International Ege Composite Materials Symposium (KOMPEGE 2021), Attendee, Antalya, Turkey, 2021

V. International Ege Composite Materials Symposium (KOMPEGE 2021), Audience, Antalya, Turkey, 2021

1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021), Working Group, Erzurum, Turkey, 2021

1st INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN FUNDAMENTAL AND APPLIED SCIENCES (ISFAS-2021), Session Moderator, Erzurum, Turkey, 2021

Representation and Promotion Activities

Institutional Representation, <https://worldbhcd.org/>, Australia, Gold-Coast, 2021 - 2021

Non Academic Experience

Türk toksikoloji derneği