### Prof. ZEKERİYA ARVASİ

### **Personal Information**

Email: zarvasi@ogu.edu.tr

Web: https://avesis.ogu.edu.tr/zarvasi

#### International Researcher IDs

ScholarID: hoy6v8EAAAAJ ScopusID: 15730488800 Yoksis Researcher ID: 5639

#### **Education Information**

Doctorate, University of Wales, Bangor, Mathematics, United Kingdom 1991 - 1994

Postgraduate, University of Leeds, Mathematics, United Kingdom 1990 - 1991

Undergraduate, Anadolu University, Faculty Of Science, Department Of Mathematics, Turkey 1984 - 1988

#### **Dissertations**

Doctorate, Applications in commutative algebra of the Moore complex of a simplicial algebra, University of Wales, Bangor, Mathematics, 1994

Postgraduate, Macaulay and Gorenstein Rings, University of Leeds, Mathematics, 1991

# **Academic Titles / Tasks**

Professor, Eskisehir Osmangazi University, FEN FAKÜLTESİ, MATEMATİK VE BİLGİSAYAR BİLİMLERİ BÖLÜMÜ, 2003 - Continues

Associate Professor, Eskisehir Osmangazi University, FEN FAKÜLTESİ, MATEMATİK VE BİLGİSAYAR BİLİMLERİ BÖLÜMÜ, 1998 - 2003

Assistant Professor, Eskisehir Osmangazi University, FEN FAKÜLTESİ, MATEMATİK VE BİLGİSAYAR BİLİMLERİ BÖLÜMÜ, 1995 - 1998

### Academic and Administrative Experience

Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2012 - Continues Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2011 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. On classifying simplicial modules
   ARVASİ Z., ILGAZ ÇAĞLAYAN E.
   Communications in Algebra, vol.52, no.3, pp.945-959, 2024 (SCI-Expanded)
- II. Computing 3-dimensional groups: Crossed squares and cat2-groups ARVASİ Z., Odabas A., Wensley C. D.

JOURNAL OF SYMBOLIC COMPUTATION, vol.114, pp.267-281, 2023 (SCI-Expanded)

III. Commutativity degree of crossed modules

ARVASİ Z., Çağlayan E. I., ODABAŞ A.

Turkish Journal of Mathematics, vol.46, no.1, pp.242-256, 2022 (SCI-Expanded)

IV. On 2-algebras: crossed R-modules and categorical R-algebras

Arvasi Z., Ilgaz Çağlayan E.

TURKISH JOURNAL OF MATHEMATICS, vol.45, no.3, pp.1319-1336, 2021 (SCI-Expanded)

V. Computing 2-dimensional algebras: Crossed modules and Cat1-algebras

Arvasi Z., Odabas A.

Journal of Algebra and its Applications, vol.15, no.10, 2016 (SCI-Expanded)

VI. Homotopical aspects of commutative algebras I: freeness conditions for crossed squares ARVASİ Z., ULUALAN E.

JOURNAL OF HOMOTOPY AND RELATED STRUCTURES, vol.10, no.3, pp.495-518, 2015 (SCI-Expanded)

VII. Freeness conditions for quadratic modules and quadratic chain complexes

ARVASİ Z., ULUALAN E.

GEORGIAN MATHEMATICAL JOURNAL, vol.18, no.4, pp.615-637, 2011 (SCI-Expanded)

VIII. Three-crossed modules

Arvasi Z., Kuzpinari T. S., Uslu E. O.

Homology, Homotopy and Applications, vol.11, no.2, pp.161-187, 2009 (SCI-Expanded)

IX. Quadratic and 2-crossed modules of algebras

Arvasi Z., Ulualan E.

Algebra Colloquium, vol.14, no.4, pp.669-686, 2007 (SCI-Expanded)

X. 3-Types of simplicial groups and braided regular crossed modules

Arvasi Z., Ulualan E.

Homology, Homotopy and Applications, vol.9, no.1, pp.139-161, 2007 (SCI-Expanded)

XI. Braided crossed modules and reduced simplicial groups

Arvasi Z., Kocak M., Ulualan E.

Taiwanese Journal of Mathematics, vol.9, no.3, pp.477-488, 2005 (SCI-Expanded)

XII. Freeness Conditions for 2-Crossed Modules of Commutative Algebras

ARVASİ Z., Porter T.

Applied Categorical Structures, vol.13, no.3, pp.455-471, 2005 (SCI-Expanded)

XIII. Annihilators, Multipliers and Crossed Modules

Arvasi Z., Ege U.

Applied Categorical Structures, vol.11, no.6, pp.487-506, 2003 (SCI-Expanded)

XIV. Simplicial and crossed lie algebras

AKÇA İ. İ., ARVASİ Z.

Homology, Homotopy and Applications, vol.4, no.1, pp.43-57, 2002 (SCI-Expanded)

XV. From simplicial groups to crossed complexes

ARVASİ Z.

Turkish Journal of Mathematics, vol.22, no.2, pp.185-192, 1998 (SCI-Expanded)

XVI. A combinatorial definition of n-types of simplicial commutative algebras Arvasi Z., Koçak M., Alp M.

Turkish Journal of Mathematics, vol.22, no.3, pp.243-271, 1998 (SCI-Expanded)

XVII. Crossed N-cubes and n-crossed complexes of commutitive algebras

ARVASİ Z., KOÇAK M.

Turkish Journal of Mathematics, vol.22, no.2, pp.127-143, 1998 (SCI-Expanded)

XVIII. Dold-Kan type theorems for n-types of simplicitial commutative algebras ARVASİ Z., KOÇAK M.

Turkish Journal of Mathematics, vol.22, no.2, pp.171-184, 1998 (SCI-Expanded)

XIX. Crossed squares and 2-crossed modules of commutative algebras Arvasi Z.

Theory and Applications of Categories, vol.3, pp.160-181, 1997 (SCI-Expanded)

XX. Higher dimensional peiffer elements in simplicial commutative algebras

Arvasi Z., Porter T.

Theory and Applications of Categories, vol.3, pp.1-23, 1997 (SCI-Expanded)

XXI. Simplicial and crossed resolutions of commutative algebras

Arvasi Z., Porter T.

Journal of Algebra, vol.181, no.2, pp.426-448, 1996 (SCI-Expanded)

# Articles Published in Other Journals

I. Computing High Dimensional Algebras with GAP, II

ARVASİ Z., ODABAŞ A.

Tathapi, vol.19, no.55, pp.443-447, 2020 (Peer-Reviewed Journal)

II. Computing High Dimensional Algebras with GAP, I

ARVASİ Z., ODABAŞ A.

Tathapi, vol.19, no.55, pp.428-432, 2020 (Peer-Reviewed Journal)

III. (Co)-Induced Two Crossed Modules

EGE ARSLAN U., ARVASİ Z., ONARLI G.

arXiv, 2013 (Non Peer-Reviewed Journal)

IV. Crossed Modules of Algebras

ARVASİ Z.

Mathematical & Computational Applications, vol.9, no.2, pp.173-182, 2004 (Peer-Reviewed Journal)

V. Higher Dimensional Free Crossed Modules of Commutative Algebras

ARVASİ Z., EGE ARSLAN U.

Algebra, Groups and Geometry, vol.19, no.2, pp.129-145, 2002 (Peer-Reviewed Journal)

VI. 2 Crossed Complexes and Crossed Resolutions of Lie Algebras

ARVASİ Z.

Algebra, Groups and Geometry, vol.16, pp.452-479, 1999 (Peer-Reviewed Journal)

# Papers Published in Refereed Scientific Meetings

I. 2-ALGEBRAS WITH GAP, II: IMPLEMENTATIONS

ARVASİ Z., ODABAŞ A.

INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY, ROPAR, India, 16 - 18 March 2018

 $II. \quad \hbox{$2$-ALGEBRAS WITH GAP, I: CROSSED MODULES AND CAT-1 ALGEBRAS}$ 

ARVASİ Z., ODABAŞ A.

INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY, ROPAR, India, 16 - 18 March 2018

III. The package XModAlg

ARVASİ Z., ODABAŞ A.

International Conference on Applied Analysis and Mathematical Modeling, 8 - 12 June 2015

IV. CLASSIFICATION OF GROUPS UP TO ISOCLINISM WITH GAP

ARVASİ Z., ODABAŞ A.

INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING, İstanbul, Turkey, 8 - 12 June 2015

### **Supported Projects**

ARVASİ Z., Project Supported by Higher Education Institutions, Çaprazlanmış Modüller Üzerine, 2015 - 2017

# Metrics

Publication: 31 Citation (WoS): 48 Citation (Scopus): 106 H-Index (WoS): 4 H-Index (Scopus): 6