

# **Prof. OSMAN ZEKİ OKUYUCU**

## **Personal Information**

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## **International Researcher IDs**

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Publons / Web Of Science ResearcherID: IYS-9756-2023

ScopusID: 37029914400

Yoksis Researcher ID: 18694

## **Education Information**

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2010 - 2013

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Yıl) (Tezli), Turkey 2008 - 2010

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2003 - 2007

## **Dissertations**

Doctorate, Bazı Manifoldlar Üzerinde Özel Eğriler, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2013

Postgraduate, Bir M C En Hiperyüzeyi Üzerindeki Bir Eğrinin Eğrililikleriyle Bu Eğriye Ait Şeridin Eğrilikleri Arasındaki İlişkiler, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Yıl) (Tezli), 2010

## **Research Areas**

Natural Sciences

## **Academic and Administrative Experience**

Bilecik Seyh Edebali University, 2019 - Continues

Bilecik Seyh Edebali University, 2017 - 2020

Bilecik Seyh Edebali University, 2017 - 2019

## **Courses**

Analitik Geometri II, Undergraduate, 2015 - 2016, 2014 - 2015

İleri Lineer Cebir, Postgraduate, 2015 - 2016

Analitik Geometri I, Undergraduate, 2015 - 2016

Dieferansiyel Geometride Eğri Dizaynı, Postgraduate, 2015 - 2016

Matematik ve Hayat, Undergraduate, 2015 - 2016

Öklid Dışı Geometriler, Undergraduate, 2015 - 2016, 2013 - 2014

Dieferansiyel Geometri II, Undergraduate, 2015 - 2016  
Diferansiyel Geometri I, Undergraduate, 2015 - 2016  
Soyut Matematik II, Undergraduate, 2014 - 2015  
Hareket Geometri II, Postgraduate, 2014 - 2015  
Diferensiyel Geometri II, Undergraduate, 2014 - 2015  
Analiz III, Undergraduate, 2013 - 2014  
Dönüşümler ve Geometriler, Undergraduate, 2013 - 2014  
Analiz I, Undergraduate, 2013 - 2014  
Matematik I, Undergraduate, 2013 - 2014  
Matematik II, Associate Degree, 2013 - 2014  
İleri Diferensiyel Geometri I, Postgraduate, 2013 - 2014  
Analiz II, Undergraduate, 2013 - 2014  
Matematik I, Associate Degree, 2012 - 2013  
Genl Matematik, Associate Degree, 2010 - 2011

## Advising Theses

OKUYUCU O. Z., Üç boyutlu kompakt lie gruplarında bazı genelleştirilmiş eğriler, Postgraduate, E.KIZILAY(Student), 2023  
OKUYUCU O. Z., Üç boyutlu Öklid uzayında çatılandırılmış slant helisler üzerine, Postgraduate, M.CANBİRDİ(Student), 2022  
OKUYUCU O. Z., Büyümlü yüzeyler üzerine, Postgraduate, M.ACAR(Student), 2022  
OKUYUCU O. Z., Yarı-Reel Kuaterniyonik Eğrilerin Elastik Olmayan Akuş Üzerine, Postgraduate, A.FUNDA(Student), 2019  
OKUYUCU O. Z., Üç boyutlu kompakt lie gruplarında eğriler üzerine, Postgraduate, C.DEĞIRMEN(Student), 2017  
OKUYUCU O. Z., Özel Smarandache eğrileri, Postgraduate, F.KARAMAN(Student), 2015

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

- I. **Framed curves in three-dimensional Lie groups and a Berry phase model**  
DOĞAN YAZICI B., OKUYUCU O. Z., Tosun M.  
Journal of Geometry and Physics, vol.182, 2022 (SCI-Expanded)
- II. **Electromagnetic curves and Berry phase construction of a polarized light wave along an optical fiber which is a singular curve on  $S^2$**   
Yazıcı B., OKUYUCU O. Z., Tosun M.  
Optik, vol.264, 2022 (SCI-Expanded)
- III. **Frenet Curve Couples in Three Dimensional Lie Groups**  
OKUYUCU O. Z.  
CMES - Computer Modeling in Engineering and Sciences, vol.133, no.3, pp.653-671, 2022 (SCI-Expanded)
- IV. **Framed slant helices in Euclidean 3-space**  
OKUYUCU O. Z., Canbirdi M.  
Advances in Difference Equations, vol.2021, no.1, 2021 (SCI-Expanded)
- V. **Evolution of quaternionic curve in the semi-Euclidean space  $E^{24}$**   
Kızılıç A., YILDIZ Ö. G., OKUYUCU O. Z.  
Mathematical Methods in the Applied Sciences, vol.44, no.9, pp.7577-7587, 2021 (SCI-Expanded)
- VI. **Bertrand curves in three dimensional lie groups**  
OKUYUCU O. Z., GÖK İ., YAYLI Y., Ekmekci N.  
Miskolc Mathematical Notes, vol.17, no.2, pp.999-1010, 2017 (SCI-Expanded)
- VII. **Spinor Frenet Equations in Three Dimensional Lie Groups**  
Zeki Okuyucu O. Z., Gökmən Yıldız Ö., Tosun M.  
Advances in Applied Clifford Algebras, vol.26, no.4, pp.1341-1348, 2016 (SCI-Expanded)

- VIII. **On Mannheim partner curves in three dimensional Lie groups**  
GÖK İ., Zeki Okuyucu O. Z., Ekmekci N., YAYLI Y.  
Miskolc Mathematical Notes, vol.15, no.2, pp.467-479, 2014 (SCI-Expanded)
- IX. **Characterization of speherical helices in euclidean 3-space**  
Ekmekci N., Zeki Okuyucu O. Z., YAYLI Y.  
Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica, vol.22, no.2, pp.99-108, 2014 (SCI-Expanded)
- X. **Slant helices in three dimensional Lie groups**  
Zeki Okuyucu O. Z., GÖK İ., YAYLI Y., Ekmekci N.  
Applied Mathematics and Computation, vol.221, pp.672-683, 2013 (SCI-Expanded)
- XI. **On the Quaternionic B 2-Slant Helices in the Euclidean Space E 4**  
GÖK İ., OKUYUCU O. Z., Kahraman F., Hacisalihoglu H. H.  
Advances in Applied Clifford Algebras, vol.21, no.4, pp.707-719, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **ON SPECIAL SINGULAR CURVE COUPLES OF FRAMED CURVES IN 3D LIE GROUPS**  
Doğan Yazıcı B., Okuyucu O. Z., Tosun M.  
Communications Faculty of Sciences University of Ankara Series A1: Mathematics and Statistics, vol.72, no.3, pp.710-720, 2023 (ESCI)
- II. **SMARANDACHE CURVES IN THREE DIMENSIONAL LIE GROUPS**  
YILDIZ Ö. G., DEĞIRMEN C., YILDIZ Ö. G.  
Communications Faculty of Sciences University of Ankara Series A1: Mathematics and Statistics, vol.68, no.1, pp.1175-1185, 2019 (Peer-Reviewed Journal)
- III. **Inextensible Flow of a Semi-Real Quaternionic Curve in Semi-Euclidean Space**  
YILDIZ A. F., OKUYUCU O. Z., YILDIZ Ö. G.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.67, no.1, pp.323-332, 2018 (Peer-Reviewed Journal)
- IV. **Characterizations of rectifying, normal and osculating curves in three dimensional compact Lie groups**  
Bozkurt Z., GÖK İ., OKUYUCU O. Z., EKMEKÇİ F. N.  
Life Science Journal, vol.10, no.3, pp.819-823, 2013 (Scopus)
- V. **Characterizations of the Quaternionic Mannheim Curves in Eucliden Space E 4**  
OKUYUCU O. Z.  
International Journal of Mathematical Combinatorics, vol.2, pp.44-53, 2013 (Peer-Reviewed Journal)
- VI. **Inextensible Flows of Curves in Lie Groups**  
YILDIZ Ö. G., OKUYUCU O. Z.  
Caspian Journal of Mahematical Sciences, vol.2, no.1, pp.23-32, 2013 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Bertrand and Mannheim Curves of Framed Curves in Three-Dimensional Lie Groups**  
DOĞAN YAZICI B., OKUYUCU O. Z., TOSUN M.  
11th INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Turkey, 29 August 2022
- II. **Smooth curves with singular points in three-dimensional Lie groups**  
DOĞAN YAZICI B., OKUYUCU O. Z., TOSUN M.  
19th INTERNATIONAL GEOMETRY SYMPOSIUM, Turkey, 27 June 2022
- III. **On the Twisted Surfaces in 3-Dimensional Euclidean Space with Density**

- ACAR M., OKUYUCU O. Z., YILDIZ Ö. G.  
International Conference on Research in Natural and Engineering Sciences, 14 - 15 November 2020
- IV. **Evolution of Quaternionic Curve in the Semi-Euclidean Space E 4 2**  
YILDIZ Ö. G., OKUYUCU O. Z., KIZILAY A., KIZILAY A.  
8th International Eurasian Conference on Mathematical Sciences and Applications, 27 - 30 August 2019
- V. **Smarandache Curves by Harmonic Curvature in Lie Groups**  
DEĞİRMEN C., OKUYUCU O. Z., YILDIZ Ö. G.  
17th International Geometry Symposium, 19 - 22 June 2019
- VI. **A New Approach on Slant Curves in three Dimensional Lie Groups**  
OKUYUCU O. Z., DEĞİRMEN C., GÖK İ.  
6th International Eurasian Conference on Mathematical Sciences and Applications, 15 - 18 August 2017
- VII. **On Inextensible Flow of a Semi-Real Quaternionic Curve in R42**  
YILDIZ A. F., OKUYUCU O. Z., YILDIZ Ö. G.  
15th International Geometry Symposium, Amasya, Turkey, 3 - 06 July 2017
- VIII. **Smarandache Curves in Three Dimensional Lie Groups**  
Değirmen C., OKUYUCU O. Z., YILDIZ Ö. G.  
5th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2016), 16 - 19 August 2016
- IX. **On Darboux Helices and W Direction Curves in Lie Groups**  
OKUYUCU O. Z., Kocakuşaklı E., Çanakçı Z., ÖZDEMİR Z.  
12th International Conference on Geometry and Applications, Varna, Bulgaria, 1 - 05 September 2015, vol.106, pp.634
- X. **Characterization of the Quaternionic Mannheim Curves in Euclidean Space E 4**  
OKUYUCU O. Z.  
XII. Geometri Sempozyumu, Bilecik, Turkey, 23 - 26 June 2014, pp.130
- XI. **Inextensible Flows of Curves in Lie Groups**  
YILDIZ Ö. G., OKUYUCU O. Z.  
2nd International Eurasian Conference on Mathematical Sciences and Applications, Saraybosna, Bosnia And Herzegovina, 26 - 29 August 2013, vol.1
- XII. **Spinor Frenet Equations in three Dimensional Lie Groups**  
OKUYUCU O. Z., YILDIZ Ö. G., TOSUN M.  
2nd International Eurasian Conference on Mathematical Sciences and Applications, Saraybosna, Bosnia And Herzegovina, 26 - 29 August 2013, vol.1