

# Prof. ÖNDER GÖKMEN YILDIZ

## Personal Information

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## International Researcher IDs

ScholarID: 8fatx68AAAAJ

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Publons / Web Of Science ResearcherID: DVC-8486-2022

ScopusID: 56868315200

Yoksis Researcher ID: 47635

## Education

Doctorate, Bilecik Seyh Edebali University, Fen Bilimleri Enstitüsü, Matematik (Dr) (Anadolu Üniv. Ortak), Turkey 2011 - 2015

Postgraduate, Sakarya University, Institute Of Science, Matematik (YI) (Tezli), Turkey 2009 - 2011

Undergraduate, Sakarya University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey 2005 - 2009

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Ortotomiğin Study resmi, Bilecik Seyh Edebali University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (Dr) (Anadolu Üniv. Ortak), 2015

Postgraduate, R 3 1 Minkowski uzayında yüzey üzerinde eğrilerin elastik olmayan hareketleri, Sakarya University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2011

## Research Areas

Mathematics, Geometry

## Academic and Administrative Experience

Quality Coordinator, Bilecik Seyh Edebali University, 2019 - Continues

Bilecik Seyh Edebali University, 2019 - 2020

Bilecik Seyh Edebali University, 2017 - 2019

## Courses

## Postgraduate

İleri Diferansiyel Geometri II, Postgraduate, 2017 - 2018  
İleri Diferansiyel Geometri I, Postgraduate, 2017 - 2018, 2016 - 2017  
Yarı Riemann Geometrisi I, Postgraduate, 2017 - 2018  
Fraktal Geometri, Postgraduate, 2016 - 2017  
İleri Lineer Cebir, Postgraduate, 2016 - 2017

## Undergraduate

Fraktal, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Genel Matematik, Undergraduate, 2018 - 2019, 2017 - 2018  
Lineer Cebir I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Fraktal ve Doğa, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Lineer Cebir II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Hareket Geometrisine Giriş, Undergraduate, 2016 - 2017, 2015 - 2016  
Öklid Dışı Geometriler, Undergraduate, 2016 - 2017  
İstatistik, Undergraduate, 2015 - 2016  
Kinematik, Undergraduate, 2015 - 2016  
Öklid Geometrisi, Undergraduate, 2015 - 2016  
Matematik II, Undergraduate, 2014 - 2015

## Associate Degree

Matematik I, Associate Degree, 2013 - 2014

## Supervised Theses

Yıldız Ö. G., 4-boyutlu Öklid uzayında tip-2 kuaterniyonik çatıya göre kuaterniyonik eğrilerin evolüsyonu, Postgraduate, H.USTA(Student), 2024  
YILDIZ Ö. G., Çatılandırılmış involüt-evolüt eğri çiftleri üzerine, Postgraduate, E.GÜRSAÇ(Student), 2023  
YILDIZ Ö. G., 4-boyutlu Öklid uzayında çatılandırılmış oskülütör ve rektifiyan eğriler, Postgraduate, M.NUR(Student), 2022  
YILDIZ Ö. G., E42 yarı Öklid uzayında yarı reel kuaterniyonik eğrilerin evolüsyonu üzerine, Postgraduate, A.KIZILAY(Student), 2021  
YILDIZ Ö. G., Yoğunluklu minkowski uzayında lightlike dönme eksenli dönel yüzeyler, Postgraduate, B.ÖZDOĞRU(Student), 2021  
YILDIZ Ö. G., Kuaterniyonik eğrilerin evolüsyonu üzerine, Postgraduate, Ö.İÇER(Student), 2019

## Journal articles indexed in SCI, SSCI, and AHCI

- I. **Tubular surfaces associated with framed base curves in Euclidean 3-space**  
Eren K., YILDIZ Ö. G., Akyiğit M.  
Mathematical Methods in the Applied Sciences, vol.45, no.18, pp.12110-12118, 2022 (SCI-Expanded)
- II. **On the evolution of framed curves in Euclidean 3-space**  
YILDIZ Ö. G.  
Mathematical Methods in the Applied Sciences, vol.45, no.18, pp.12158-12166, 2022 (SCI-Expanded)
- III. **Evolution of quaternionic curve in the semi-Euclidean space E24**  
Kızılay A., YILDIZ Ö. G., OKUYUCU O. Z.  
Mathematical Methods in the Applied Sciences, vol.44, no.9, pp.7577-7587, 2021 (SCI-Expanded)
- IV. **On the trajectory ruled surfaces of framed base curves in the Euclidean space**  
YILDIZ Ö. G., Akyiğit M., Tosun M.  
Mathematical Methods in the Applied Sciences, vol.44, no.9, pp.7463-7470, 2021 (SCI-Expanded)
- V. **Constructions of helicoidal surfaces in a 3-dimensional complete manifold with density**

YILDIZ Ö. G.

Mathematics, vol.7, no.1, 2019 (SCI-Expanded)

- VI. **Type I + helicoidal surfaces with prescribed weighted mean or Gaussian curvature in Minkowski space with density**  
YILDIZ Ö. G., Hızal S., Akyiğit M.  
Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica, vol.26, no.3, pp.99-108, 2018 (SCI-Expanded)
- VII. **A Note on Evolution of Curves in the Minkowski Spaces**  
YILDIZ Ö. G., Tosun M.  
Advances in Applied Clifford Algebras, vol.27, no.3, pp.2873-2884, 2017 (SCI-Expanded)
- VIII. **Spinor Frenet Equations in Three Dimensional Lie Groups**  
Zeki Okuyucu O. Z., Gökmen Yıldız Ö. G., Tosun M.  
Advances in Applied Clifford Algebras, vol.26, no.4, pp.1341-1348, 2016 (SCI-Expanded)
- IX. **On the Semisimilarity and Consemisimilarity of Split Quaternions**  
YILDIZ Ö. G., Kosal H. H., Tosun M.  
Advances in Applied Clifford Algebras, vol.26, no.2, pp.847-859, 2016 (SCI-Expanded)
- X. **On the determination of a developable spherical orthotomic ruled surface**  
YILDIZ Ö. G., Karakuş S., Hacısalihoglu H. H.  
Bulletin of Mathematical Sciences, vol.5, no.1, pp.137-146, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Inextensible Flow of Quaternionic Curves According to Type 2-Quaternionic Frame in the Euclidean Space**  
YILDIZ Ö. G., Usta H.  
Mathematical Sciences and Applications E-Notes, 2024 (Peer-Reviewed Journal)
- II. **On the Framed Normal Curves in Euclidean 4-space**  
AKYIĞIT M., YILDIZ Ö. G.  
Fundamental journal of mathematics and applications (Online), vol.4, no.4, pp.258-263, 2021 (Peer-Reviewed Journal)
- III. **A Note on Surfaces of Revolution Which Have Lightlike Axes of Revolution in Minkowski Space with Density**  
YILDIZ Ö. G., ÖZDOĞRU B.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.Özel Sayı - 1, pp.40-44, 2020 (Peer-Reviewed Journal)
- IV. **Yoğunluklu Minkowski Uzayında Lightlike Dönme Eksenli Dönel Yüzeyler Üzerine Bir Not**  
YILDIZ Ö. G., ÖZDOĞRU B.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 2020 (Peer-Reviewed Journal)
- V. **SMARANDACHE CURVES IN THREE DIMENSIONAL LIE GROUPS**  
YILDIZ Ö. G., DEĞİRMEN 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)
- VI. **A Note on Evolution of Quaternionic Curves in the Euclidean Space  $R^4$**   
YILDIZ Ö. G., İÇER Ö.  
Konuralp Journal of Mathematics, vol.7, no.2, pp.462-469, 2019 (Peer-Reviewed Journal)
- VII. **Constructions of Type III+ Helicoidal Surfaces in Minkowski Space with Density**  
YILDIZ Ö. G., AKYIĞIT M.  
International Electronic Journal of Geometry, vol.12, no.1, pp.20-25, 2019 (Peer-Reviewed Journal)
- VIII. **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)

- IX. **On the Quaternionic Normal Curves in the Semi Euclidean Space  $E_4^2$**   
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S.  
International Journal of Mathematical Combinatorics, vol.3, pp.68-76, 2016 (Peer-Reviewed Journal)
- X. **A New Approach about the Determination of a Developable Spherical Orthotomic Ruled Surface in  $R_3^1$**   
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., HACISALİHOĞLU H. H.  
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.9, no.1, pp.62-69, 2016 (Peer-Reviewed Journal)
- XI. **On the Determination of a Developable Spherical Orthotomic Timelike Ruled Surface**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., Hasan Hilmi H.  
KONURALP TIP DERGISI, vol.3, no.1, pp.75-83, 2015 (Peer-Reviewed Journal)
- XII. **Study Map of Orthotomic of a Circle**  
YILDIZ Ö. G., Hasan Hilmi H.  
International Journal of Mathematical Combinatorics, vol.4, pp.7-17, 2014 (Peer-Reviewed Journal)
- XIII. **A Note on Inextensible Flows of Curves on Oriented Surface**  
MASAL M., ERSOY S., YILDIZ Ö. G.  
CUBO A Mathematical Journal, vol.16, no.3, pp.11-19, 2014 (Peer-Reviewed Journal)
- XIV. **A Note on Inextensible Flows of Curves in  $E_n$**   
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., TOSUN M.  
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.6, no.2, pp.118-124, 2013 (Peer-Reviewed Journal)
- XV. **Inextensible Flows of Curves in Lie Groups**  
YILDIZ Ö. G., OKUYUCU O. Z.  
Caspian Journal of Mahemathical Sciences, vol.2, no.1, pp.23-32, 2013 (Peer-Reviewed Journal)

## Books

- I. **Eğriler Teorisi**  
ERSOY S., AKYİĞİT M., YILDIZ Ö. G.  
Nobel Akademik Yayıncılık, 2023

## Papers Presented at Peer-Reviewed Scientific Conferences

- I. **On the Framed Rectifying Curves in Euclidean 4-space**  
YILDIZ Ö. G., ŞAVLI M. N.  
19th International Geometry Symposium, Edirne, Turkey, 27 June 2022, (Summary Text)
- II. **A Note on InvoluteEvolute Curves of Framed Curves in the Euclidean Space**  
YILDIZ Ö. G., Gürsaç E.  
18th International Geometry Symposium, Malatya, Turkey, 12 July 2021, (Summary Text)
- 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, (Summary Text)
- IV. **Tubular Surfaces Associated with Framed Base Curves**  
EREN K., YILDIZ Ö. G., AKYİĞİT M.  
9th International Eurasian Conference on Mathematical Sciences and Applications, 25 August 2020, (Summary Text)
- V. **On the Trajectory Ruled Surface of Framed Base Curves in  $E_3$**   
YILDIZ Ö. G., AKYİĞİT M., TOSUN M.

8th International Eurasian Mathematical Sciences and Applications, 27 - 30 August 2019, (Summary Text)

- VI. **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, (Summary Text)
- VII. **3-boyutlu Minkowski Uzayında Yoğunluklu Dönel Yüzeyler Üzerine**  
İÇER Ö., YILDIZ Ö. G.  
14. Ankara Matematik Günleri, Turkey, 28 - 29 June 2019, (Summary Text)
- VIII. **4-Boyutlu Öklid Uzayında Kuaterniyonik Eğrilerin Evolüsyonu Üzerine**  
İÇER Ö., YILDIZ Ö. G.  
14. Ankara Matematik Günleri, Turkey, 28 - 29 June 2019, (Summary Text)
- IX. **A Note on Surfaces of Revolution which Have Lightlike Axes of Revolution in Minkowski Space with Density**  
YILDIZ Ö. G., ÖZDOĞRU B.  
17th International Geometry Symposium, 19 - 22 June 2019, (Summary Text)
- X. **Smarandache Curves by Harmonic Curvature in Lie Groups**  
DEĞİRMEN C., OKUYUCU O. Z., YILDIZ Ö. G.  
17th International Geometry Symposium, 19 - 22 June 2019, (Summary Text)
- XI. **Helicoidal Surfaces Which Have the Timelike Axis in Minkowski Space with Density**  
YILDIZ Ö. G., ERGÜT M., AKYİĞİT M.  
7th International Eurasian Conference On Mathematical Sciences and Applications, Kiev, Ukraine, 28 - 31 August 2018, vol.1, pp.16-19, (Full Text)
- XII. **On the Spherical Orthotomic of Lorentzian Spherical Timelike Curves**  
YILDIZ Ö. G.  
13th International Conference on Geometry and Applications, Varna, Bulgaria, 1 - 05 September 2017, (Summary Text)
- XIII. **A Note on Spherical Orthotomic of Lorentzian Spherical Spacelike Curves**  
YILDIZ Ö. G.  
6th International Eurasian Conference on Mathematical Sciences and Applications, Budapest, Hungary, 15 - 18 August 2017, (Summary Text)
- XIV. **Local Diffeomorphic Image of Spherical Antiorthotomic of Lorentzian Spherical Timelike Curves**  
YILDIZ Ö. G.  
6th International Eurasian Conference on Mathematical Sciences and Applications, Budapest, Hungary, 15 - 18 August 2017, (Summary Text)
- XV. **Some Characterizations of Quaternionic Normal Curves**  
YILDIZ Ö. G., DOĞAN B., ÖZKALDI KARAKUŞ S.  
15th International Geometry Symposium, 3 - 06 July 2017, (Summary Text)
- XVI. **Spherical Orthotomic and Spherical Antiorthotomic on the Pseudo-hyperbolic Space**  
YILDIZ Ö. G., TOSUN M.  
15. International Geometry Symposium, Amasya, Turkey, 3 - 06 July 2017, (Summary Text)
- XVII. **On Inextensible Flow of a Semi-Real Quaternionic Curve in  $R_4^2$**   
YILDIZ A. F., OKUYUCU O. Z., YILDIZ Ö. G.  
15th International Geometry Symposium, Amasya, Turkey, 3 - 06 July 2017, (Summary Text)
- XVIII. **On the Evolution of Quaternionic Curves in Euclidean 4-space**  
YILDIZ Ö. G., İÇER Ö.  
International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017, (Summary Text)
- XIX. **Evolution of Generalized Space Curve in Minkowski Space**  
YILDIZ Ö. G., TOSUN M.  
5th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2016), Belgrade, Serbia, 16 - 19 August 2016, (Summary Text)

- XX. **On the Semisimilarity and Consemisimilarity of Split Quaternions**  
YILDIZ Ö. G., KÖSAL H. H., TOSUN M.  
5th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2016), Belgrade, Serbia, 16 - 19 August 2016, (Summary Text)
- XXI. **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, (Summary Text)
- XXII. **A New Approach about the Determination of a Developable Spherical Orthotomic Spacelike Ruled Surface**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., Hacısalihoglu H. H.  
3rd International Eurasian Conference on Mathematical Sciences and Applications, Viyana, Austria, 25 - 28 August 2014, (Summary Text)
- XXIII. **On the Determination of a Timelike Developable Spherical Orthotomic Ruled Surface**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., Hasan Hilmi H.  
3rd International Eurasian Conference on Mathematical Sciences and Applications, Viyana, Austria, 25 - 28 August 2014, (Summary Text)
- XXIV. **Study Map of Spherical Orthotomic of a Circle**  
YILDIZ Ö. G., Hasan Hilmi H.  
V Congress of the Turkic World Mathematical Society, Bishkek, Kyrgyzstan, 30 - 04 June 2014, (Summary Text)
- XXV. **On the Determination of a Developable Spherical Orthotomic Ruled Surface**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., Hasan Hilmi H.  
XII. Geometri Sempozyumu, Bilecik, Turkey, 23 - 26 June 2014, (Summary Text)
- XXVI. **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, (Summary Text)
- XXVII. **On the Quaternionic Normal Curves in the Euclidean Space**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S.  
2nd International Eurasian Conference on Mathematical Sciences and Applications, Saraybosna, Bosnia And Herzegovina, 26 - 29 August 2013, vol.1, (Summary Text)
- XXVIII. **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, (Summary Text)
- XXIX. **On the Quaternionic Normal Curves in  $E^3$**   
ÖZKALDI KARAKUŞ S., YILDIZ Ö. G.  
XI. Geometri Sempozyumu, Ordu, Turkey, 1 - 05 July 2013, (Summary Text)
- XXX. **A Note on Inextensible Flows of Curves in  $E_n$**   
YILDIZ Ö. G., TOSUN M., ÖZKALDI KARAKUŞ S.  
1st International Eurasian Conference on Mathematical Sciences and Applications, Piriştine, Montenegro, 3 - 07 September 2012, vol.1, (Summary Text)
- XXXI. **On the Quaternionic Normal Curves in the Semi-Euclidean Space  $E^4_2$**   
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S.  
X. Geometri Sempozyumu, Balıkesir, Turkey, 13 - 16 June 2012, vol.1, (Summary Text)
- XXXII. **Öklid Uzayında Küre Üzerinde Yatan Eğrilerin Elastik Olmayan Akışı Üzerine**  
YILDIZ Ö. G., TOSUN M.  
IX. Geometri Sempozyumu, Samsun, Turkey, 7 - 10 June 2011, (Summary Text)