

# Prof. ÖNDER GÖKMEN YILDIZ

## Personal Information

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## International Researcher IDs

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

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## Education Information

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

## 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

## Academic and Administrative Experience

Bilecik Seyh Edebali University, 2019 - 2020

Bilecik Seyh Edebali University, 2017 - 2019

## Courses

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

İleri Diferansiyel Geometri II, Postgraduate, 2017 - 2018

Fraktal ve Doğa, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

İleri Diferansiyel Geometri I, Postgraduate, 2017 - 2018, 2016 - 2017

Lineer Cebir II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

Yarı Riemann Geometrisi I, Postgraduate, 2017 - 2018

Hareket Geometrisine Giriş, Undergraduate, 2016 - 2017, 2015 - 2016

Öklid Dışı Geometrilere, Undergraduate, 2016 - 2017

Fraktal Geometri, Postgraduate, 2016 - 2017  
İleri Lineer Cebir, Postgraduate, 2016 - 2017  
İstatistik, Undergraduate, 2015 - 2016  
Kinematik, Undergraduate, 2015 - 2016  
Öklid Geometrisi, Undergraduate, 2015 - 2016  
Matematik II, Undergraduate, 2014 - 2015  
Matematik I, Associate Degree, 2013 - 2014

## Advising Theses

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

## Published journal articles indexed by 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., Hacısalihoğlu 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**  
AKYİĞİT 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., AKYİĞİT 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  $R^3$**   
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 DERGİSİ, 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 En**  
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 & Book Chapters

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

## Refereed Congress / Symposium Publications in Proceedings

- 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
- II. **A Note on Involute Evolute Curves of Framed Curves in the Euclidean Space**  
YILDIZ Ö. G., GÜRSAC E.  
18th International Geometry Symposium, Malatya, Turkey, 12 July 2021
- 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. **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
- 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
- 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
- VII. **4-Boyutlu Öklid Uzayında Kuaterniyonik Eğrilerin Evolüsyonu Üzerine**  
İÇER Ö., YILDIZ Ö. G.  
14. Ankara Matematik Günleri, Turkey, 28 - 29 June 2019
- VIII. **3-boyutlu Minkowski Uzayında Yoğunluklu Dönel Yüzeyler Üzerine**  
İÇER Ö., YILDIZ Ö. G.  
14. Ankara Matematik Günleri, Turkey, 28 - 29 June 2019
- IX. **Smarandache Curves by Harmonic Curvature in Lie Groups**  
DEĞİRMEN C., OKUYUCU O. Z., YILDIZ Ö. G.  
17th International Geometry Symposium, 19 - 22 June 2019
- X. **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

- 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
- 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
- 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
- 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
- XV. **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
- XVI. **Some Characterizations of Quaternionic Normal Curves**  
YILDIZ Ö. G., DOĞAN B., ÖZKALDI KARAKUŞ S.  
15th International Geometry Symposium, 3 - 06 July 2017
- XVII. **On Inextensible Flow of a Semi-Real Quaternionic Curve in  $R^4$**   
YILDIZ A. F., OKUYUCU O. Z., YILDIZ Ö. G.  
15th International Geometry Symposium, Amasya, Turkey, 3 - 06 July 2017
- 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
- XIX. **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
- 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
- XXI. **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
- XXII. **A New Approach about the Determination of a Developable Spherical Orthotomic Spacelike Ruled Surface**  
YILDIZ Ö. G., ÖZKALDI KARAKUŞ S., Hacısalıhoğlu H. H.  
3rd International Eurasian Conference on Mathematical Sciences and Applications, Viyana, Austria, 25 - 28 August 2014
- 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
- 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

- 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
- XXVI. **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
- XXVII. **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
- XXVIII. **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
- XXIX. **On the Quaternionic Normal Curves in  $E^3$**   
ÖZKALDI KARAKUŞ S., YILDIZ Ö. G.  
XI. Geometri Sempozyumu, Ordu, Turkey, 1 - 05 July 2013
- 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
- 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
- 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