

# HASAN KELEŞ

## LECT. PHD

Email : hasankeles@ktu.edu.tr

Office Phone : [+90 462 377 2568](tel:+904623772568)

Address : hasankeles@ktu.edu.tr

### International Researcher IDs

ORCID: 0000-0001-8436-890X

Publons / Web Of Science ResearcherID: P-8886-2016

ScopusID: 57219523741

Yoksis Researcher ID: 152585

### Biography

He was born in 1966 in Gümüşhane's KELKİT district.

### Certificates, Courses and Trainings

Other, Yeni Anaysa Perspektifinde Sendikal Haklar Projesi, ÇSGB, 2016

Education Management and Planning, X th INTERNATIONAL STATISTICS DAYS CONFERENCE, GİRESUN UNIVERSITY, 2016

### Articles Published in Other Journals

1. **Multiplication of Matrices**

KELEŞ H.

Indonesian Journal of Mathematics and Application, vol.2, no.1, pp.1-8, 2024 (Peer-Reviewed Journal)

2. **ON THE DIGITS OF NUMBERS IN THE SYSTEM LOGIC B3**

KELEŞ H.

Journal of Applied and Pure Mathematics, vol.6, pp.97-103, 2024 (Peer-Reviewed Journal)

3. **Similarity and equivalence in poloid**

KELEŞ H.

The Aligarh Bulletin of Mathematics, vol.42, no.2, pp.59-67, 2024 (Peer-Reviewed Journal)

4. **POLOID AND MONOID**

Keleş H.

The Aligarh Bulletin of Mathematics, vol.41, no.1, pp.15-21, 2023 (Peer-Reviewed Journal)

5. **SPIN HALF-ADDER IN B3**

Keleş H.

Journal of Applied and Pure Mathematics, vol.5, no.3, pp.187-196, 2023 (Peer-Reviewed Journal)

6. **ON GENERALIZED LATTICE B2**

Keleş H.

Journal of Applied and Pure Mathematics, vol.5, no.1, pp.1-8, 2023 (Peer-Reviewed Journal)

7. **On Some Reflections of Profit and Loss Functions**

Keleş H.

Al-Salam Journal for Engineering and Technology, vol.2, no.2, pp.30-36, 2023 (Peer-Reviewed Journal)

8. **On the Involution Matrices of the k th Degree**

Keleş H.

Iraqi Journal for Computer Science and Mathematics, vol.4, no.1, pp.10-14, 2022 (Scopus)

9. **POLOIDS AND MATRICES**  
Keleş H.  
The Aligarh Bulletin of Mathematics, vol.41, no.1, pp.41-52, 2022 (Peer-Reviewed Journal)
10. **On Results Between Matrix Division and Some other Matrix Operations**  
KELEŞ H.  
Al-Salam Journal for Engineering and Technology, vol.1, no.2, pp.5-8, 2022 (Peer-Reviewed Journal)
11. **ON TYPES OF AVERAGE ACCORDING TO THE CHANGING AVERAGE**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.12, pp.184-186, 2018 (Peer-Reviewed Journal)
12. **ON TEST STATISTICS ACCORDING TO THE CHANGING AVERAGE**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.12, pp.53-55, 2018 (Peer-Reviewed Journal)
13. **On Reflection of Conic Sections According to Basic Functions**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.9, pp.133-136, 2018 (Peer-Reviewed Journal)
14. **On the Symmetric Conditions of Simple Functions**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.8, pp.69-74, 2018 (Peer-Reviewed Journal)
15. **On Matrix Division And Rational Matrices**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.8, pp.279-286, 2018 (Peer-Reviewed Journal)
16. **On a generalized theorem of de Bruijn and Erdős in d-dimensional Fuzzy Linear Spaces**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.5, no.1, pp.102-105, 2018 (Peer-Reviewed Journal)
17. **On General Construction of d-dimensional Linear Spaces**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.4, no.8, pp.365-368, 2017 (Peer-Reviewed Journal)
18. **Interpretation of Conic Sections with Side Conditional Extremes**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.4, no.6, pp.84-88, 2017 (Peer-Reviewed Journal)
19. **Different Approaches on the Matrix Division and Generalization of Cramer's Rule**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.4, no.3, pp.105-108, 2017 (Peer-Reviewed Journal)
20. **On some properties combinatorics of Graphs in the d-dimensional FLS**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.4, no.2, pp.93-97, 2017 (Peer-Reviewed Journal)
21. **ON MEASUREMENT ASSESSMENT AND DIVISION MATRICES**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.3, no.6, pp.233-237, 2016 (Peer-Reviewed Journal)
22. **On The Linear Transformation of Division Matrices**  
KELEŞ H.  
Journal of Scientific and Engineering Research, vol.3, no.5, pp.101-104, 2016 (Peer-Reviewed Journal)
23. **SİYANUR BOZUNMA HIZININ FUZZY LİNEER UZAYLARINDAKİ FLU BİR BOZUNMASI**  
KELEŞ H., YAZICI E. Y., DEVECİ H., ALP İ., KESİMAL A.  
DOĞU KARADENİZ BÖLGESİ MADEN KAYNAKLARININ DEĞERLENDİRİLMESİ, no.115, pp.341-343, 2006 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **On Some Properties of Poloids and Mappings**

- Keleş H.  
in: Current Debates on Natural and Engineering Sciences 9, ÇOĞUN Hikmet Y., PARLAR İshak, ÜZMUŞ Hasan, Editor,  
Bilgin Kültür Sanat Yayınları Certificate No: 20193, Ankara, pp.616-624, 2023
2. **New Approaches To Some Matrix Equation Solutions**  
Keleş H.  
in: Current Debates on Natural and Engineering Sciences 9, ÇOĞUN Hikmet Y., PARLAR İshak, ÜZMUŞ Hasan, Editor,  
Bilgin Kültür Sanat Yayınları Certificate No: 20193, Ankara, pp.347-356, 2023
3. **Comparison of Equivalent, Similar Matrices and Regular Matrices**  
KELEŞ H.  
in: Current Debates on Natural and Engineering Sciences 5, ÇOĞUN Hikmet Y., PARLAR İshak, Editor, Bilgin Kültür  
Sanat Yayınları, Ankara, pp.728-745, 2022
4. **Potent Matrices**  
KELEŞ H.  
in: Current Debates on Natural and Engineering Sciences 5, ÇOĞUN Hikmet Y., PARLAR İshak, Editor, Bilgin Kültür  
Sanat Yayınları, Ankara, pp.28-35, 2022
5. **Çözümlü Genel Matematik, Matematik - I-**  
KELEŞ H.  
Akademi, Trabzon, Umuttepe Yayınları, Kocaeli, Trabzon, 2018
6. **MATEMATİK-I-MATEMATİK-I**  
KELEŞ H.  
BİLAL OFSET, Denizli, 2018
7. **ÇÖZÜMLÜ GENEL MATEMATİK-II-**  
KELEŞ H.  
Akademi Kitabevi Yayınları, Trabzon, 2016
8. **Çözümlü Genel Matematik II**  
KELEŞ H.  
Yazara Ait, Trabzon, 2016
9. **LİNEER CEBİRE GİRİŞ-I-**  
KELEŞ H.  
Bordo Trabzon, Denizli, 2015
10. **GENEL VE ÇÖZÜMLÜ MATEMATİK-I-**  
KELEŞ H.  
Seçkin Kitapçılar, Trabzon, 2015
11. **Genel ve Çözümlü Matematik I**  
KELEŞ H.  
Seçkin Kitapçılar, Akademi, Bordo, Altaş, Trabzon, 2015
12. **Lineer Cebire Giriş I**  
KELEŞ H.  
Bordro (Dağıtım), Trabzon, 2015

## Refereed Congress / Symposium Publications in Proceedings

1. **ON THE BASICS OF LOGICS B3 AND BOOLEAN**  
KELEŞ H.  
AFRICA 4TH INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Casablanca, Morocco, 19 - 21  
January 2024, pp.213-221
2. **ON NEW DEVELOPMENTS IN MULTIPLICATION MATRIX**  
Keleş H.  
AFRICA 4TH INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Casablanca, Morocco, 19 - 21  
January 2024, pp.207-212

3. **ON THE CONCEPT OF CENTROID FOR ELEMENT  $x$  IN  $\mathbb{R}$**   
KELEŞ H.  
AFRICA 4TH INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Casablanca, Morocco, 19 - 21 January 2024, pp.200-206
4. **ON FRACTION MATRICES (A/B) AND EIGENVALUES-EIGENVECTORS**  
Keleş H.  
10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Kırklareli, Turkey, 6 - 08 January 2024, pp.58-62
5. **IDEALS AND REGULAR MATRICES**  
Keleş H.  
10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Kırklareli, Turkey, 6 - 08 January 2024, pp.54-57
6. **ON COMPLEMENT OF BASE IN  $B_3$**   
Keleş H.  
10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Kırklareli, Turkey, 6 - 08 January 2024, pp.47-53
7. **ON THE OPERATION OF DIVISION AND LINEAR MAPPING**  
Keleş H.  
7th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Budapest, Hungary, 10 March 2023, pp.155-159
8. **ON ROW CO-DIVISORS IN REGULAR MATRICES**  
Keleş H.  
7th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Budapest, Hungary, 10 March 2023, pp.150-154
9. **ON EIGENVALUES AND EIGENVECTORS IN  $M_n(\mathbb{R})$**   
Keleş H.  
ICHEAS 3RD INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Cape-Town, South Africa, 25 - 29 January 2023, pp.98-103
10. **ON THE ESCORT ELEMENT PROPERTY OF  $(P_4)$  POLOID AND MATRICES**  
Keleş H.  
ICHEAS 3RD INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Cape-Town, South Africa, 25 - 29 January 2023, pp.93-97
11. **ON MAIN PROPERTIES OF THE POLOID AND THE GROUP**  
Keleş H.  
AICNHS 1st INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Cairo, Egypt, 12 January 2023, pp.61-65
12. **ON SUBPOLOID**  
Keleş H.  
AICNHS 1st INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Cairo, Egypt, 12 January 2023, pp.67-75
13. **ON SOME CONCLUSIONS OPERATIONAL PROPERTIES OF RATIONAL MATRIXES**  
KELEŞ H.  
4. INTERNATIONAL PALANDOKEN SCIENTIFIC STUDIES CONGRESS, Erzurum, Turkey, 28 - 30 April 2022
14. **ON SOME RESULTS ROW CO-DIVISION IN REGULAR SQUARE MATRICES**  
KELEŞ H.  
4. INTERNATIONAL PALANDOKEN SCIENTIFIC STUDIES CONGRESS, Erzurum, Turkey, 28 - 30 April 2022, pp.243-249
15. **On Some Conclusions the Relationship between Demand and Supply**  
KELEŞ H.  
2.International Congress of Engineering and Natural Sciences Studies, Ankara, Turkey, 7 - 09 May 2022, pp.581-588
16. **On Some Conclusions the Relationship between Profit and Loss Functions**  
KELEŞ H.  
2.International Congress of Engineering and Natural Sciences Studies, Ankara, Turkey, 7 - 09 May 2022, pp.574-580
17. **On Row Co-divisors and Column Co-divisors in Regular Square Matrices**

KELEŞ H.

2.International Congress of Engineering and Natural Sciences Studies, Ankara, Turkey, 7 - 09 May 2022, pp.568-573

**18. ON RESULTS DIVISIBILITY AND MULTIPLIERS OF REGULAR MATRICES OF ORDER  $n$**

KELEŞ H.

8TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS , İstanbul, Turkey, 12 - 15 March 2022, pp.712-718

**19. ON THE RELATIONSHIP BETWEEN TRANSPOSE AND DIVISION**

KELEŞ H.

8TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS , İstanbul, Turkey, 12 - 15 March 2022, pp.719-722

**20. On Reflections of Profit and Loss Functions**

KELEŞ H.

INTERNATIONAL CURRENT RESEARCH SYMPOSIUM 2022 (ICRS'22), Yozgat, Turkey, 7 - 09 March 2022, pp.223-228

**21. On Reflections of Demand and Supply Functions**

KELEŞ H.

INTERNATIONAL CURRENT RESEARCH SYMPOSIUM 2022 (ICRS'22), Yozgat, Turkey, 7 - 09 March 2022, pp.217-222

**22. ON CHANGING AVERAGES AND RESULTS IN SYSTEMS**

KELEŞ H.

İKSAD – INSTITUTE OF ECONOMIC DEVELOPMENT AND SOCIAL RESEARCHES, Erzurum, Turkey, 7 - 09 December 2018, vol.1, pp.188

**23. ON MAIN AXES OF CONIC SECTIONS REFLECTION ACCORDING TO SIMPLE FUNCTIONS**

KELEŞ H.

İKSAD – INSTITUTE OF ECONOMIC DEVELOPMENT AND SOCIAL RESEARCHES, Erzurum, Turkey, 7 - 09 December 2018, vol.1, pp.1006-1011

**24. ON THE GENERAL REFLECTION OF SIMPLE FUNCTIONS**

KELEŞ H.

İKSAD – INSTITUTE OF ECONOMIC DEVELOPMENT AND SOCIAL RESEARCHES, Erzurum, Turkey, 7 - 09 December 2018, vol.1, pp.1016-1021

**25. Matris Bölmesi Keşifinin Öğretim ve Eğitime Katkısı Üzerine**

KELEŞ H.

VI. INTERNATIONAL CONGRESS ON RESEARCH IN EDUCATION, Rize, Turkey, 13 - 15 October 2016, vol.1, pp.150-160

**26. Matrislerde Bölme İşlemi ve Graph Teory**

KELEŞ H.

Xth International Statistics Days Conference 2016 (ISDC'2016), Giresun, Turkey, 7 October - 09 December 2016, pp.837-844

**27. On Division Operation of Matrices and Some Special Matrices**

KELEŞ H.

Caucasian Mathematics Conference (CMC-II), 25 August 2016

**28. Matris Bölmesi ve Bazı Uygulamaları**

RECEP HAKAN D.

28. ULUSAL MATEMATİK SEMPOZYUMU, Antalya, Turkey, 7 - 09 September 2015, pp.170

**29. The Rational Matrices**

KELEŞ H.

Mathematical Models in Engineering, Ankara, Turkey, 28 - 31 July 2010, pp.3

**30. On Some Properties Combinatorics of Graphs in the  $d$ -dimensional FLS**

KELEŞ H., YAZICIOĞLU R. A., İNCESU M.

International Workshop II On Applications Of Wavelets To Real World Problems, İstanbul, Turkey, 07 June 2007

## Other Publications

1. **A note on  $r$  -circulant matrices involving generalized Narayana numbers.**  
 , Keleş H.  
 Technical Report, pp.1-2, 2024

## Visual Activities

KELEŞ H., Radio Program, 2010 - 2010  
KELEŞ H., Newspaper Publishing, 1989 - 1992

## Courses

Matematik - II, Undergraduate, 2024 - 2025  
SOSYAL BİLİMLER İÇİN MATEMATİK-II, Undergraduate, 2024 - 2025  
Matematik - I-, Undergraduate, 2016 - 2017  
Genel Matematik, Undergraduate, 2016 - 2017  
Bitirme Çalışması, Undergraduate, 2016 - 2017  
Genel Matematik, Undergraduate, 2016 - 2017  
Genel Matematik, Undergraduate, 2016 - 2017  
Genel Matematik, Undergraduate, 2015 - 2016  
Sosyal Bilimler İçin Matematik - I, Undergraduate, 2015 - 2016  
Genel Matematik, Undergraduate, 2015 - 2016  
MATEMATİK-I,-II-, Undergraduate, 2000 - 2001

## Activities in Scientific Journals

Journal of Scientific and Engineering Research, Committee Member, 2017 - Continues

## Scientific Refereeing

Two Intrinsic Formulae Generated by the Jones Polynomial, Other journals, April 2024  
ASIAN JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, March 2024  
JOURNAL OF MATHEMATICAL INEQUALITIES, Journal Indexed in SCI-E, March 2024  
Iraqi Journal for Computer Science and Mathematics , Other journals, November 2023  
Iraqi Journal for Computer Science and Mathematics , Other journals, December 2022  
Project Supported by Higher Education Institutions, BAP Infrastructure, Ege University, Turkey, July 2021  
New Trends in Mathematical Sciences, Other journals, August 2016

## Scientific Research / Working Group Memberships

Group Of International World Logical Current Developments Monitoring And Management, Karadeniz Technical University, Turkey, GIWOCDEP, 2023 - Continues

## Metrics

## Congress and Symposium Activities

AFRICA 4TH INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Moderator, Casablanca, Morocco, 2024  
BALKAN 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Attendee, Kırklareli, Turkey, 2024  
Moderator, Kırklareli, Turkey, 2024  
ICMSA2018, International Conference on Mathematical Studies and Applications 2018, Invited Speaker, Karaman, Turkey, 2018  
ICMSA2018, International Conference on Mathematical Studies and Applications 2018, Invited Speaker, Karaman, Turkey, 2018  
INTERNATIONAL CONFERENCE on RECENT ADVANCES in PURE AND APPLIED MATHEMATICS (ICRAPAM2018), Invited Speaker, Trabzon, Turkey, 2018  
Xth International Statistics Days Conference 2016, Invited Speaker, Giresun, Turkey, 2016  
VI. INTERNATIONAL CONGRESS ON RESEARCH IN EDUCATION, Invited Speaker, Rize, Turkey, 2016  
MATRİS BÖLMESİ VE UYGULAMALARI, Attendee, Balıkesir, Turkey, 2015  
MATRİS BÖLMESİ VE UYGULAMALARI, Invited Speaker, Balıkesir, Turkey, 2015

## Research Areas

Social Sciences and Humanities, Mathematics, Multivariate Complex Functions and Analytic Spaces, Linear and Multilinear Algebra: Matrix Theory, Functional Analysis, General Mathematics, Geometry, Combinatorics, Mathematics Education, Natural Sciences, Engineering and Technology

## Non Academic Experience

Sakarya Üniversitesi  
Milli Eğitim Bakanlığı