

# Prof. NURHAYAT İSPİR

## Personal Information

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## Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1985 - 1989

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 1982 - 1985

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 1978 - 1982

## Dissertations

Doctorate, Riemann yüzeyleri üzerinde holomorfik ve meromorfik fonksiyonların halkaları, Ankara University, Institute Of Science, Matematik (Dr), 1989

Postgraduate, Örtme Yüzeyleri Olarak Riemann Yüzeyleri, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 1985

## Research Areas

Natural Sciences

## Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Matematik, 2009 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Matematik, 2004 - 2009

Assistant Professor, Gazi University, Fen Fakültesi, Matematik, 2002 - 2004

Assistant Professor, Ankara University, Fen Fakültesi, Matematik Bölümü, 1990 - 2002

Research Assistant, Ankara University, Fen Fakültesi, Matematik Bölümü, 1983 - 1990

## Academic and Administrative Experience

Gazi University, Fen Fakültesi, Matematik Bölümü, 2018 - Continues

Gazi University, Fen Fakültesi, Matematik Bölümü, 2009 - Continues

Gazi University, Fen Fakültesi, Matematik Bölümü, 2002 - 2005

Ankara University, Fen Fakültesi, Matematik Bölümü, 1994 - 1996

## Courses

MAT2003 AnalizIII, Undergraduate, 2017 - 2018

LİNEER POZİTİF OPERATÖR DİZLERİNİN YAKLAŞIM ÖZL.I, Postgraduate, 2017 - 2018

LİNEER POZİTİF OPERATÖR DİZLERİNİN YAKLAŞIM ÖZL.II, Postgraduate, 2017 - 2018

Mat2003 Analiz3, Undergraduate, 2017 - 2018

## Advising Theses

İSPİR N., Approximation with king type generalized Szász-Sheffer operators, Postgraduate, T.KOÇ(Student), 2020

İSPİR N., Lupaş-Szász taban fonksiyonlarına bağlı toplamsal-integral tipli gbs operatörleri ile yaklaşım, Doctorate, N.MANAV(Student), 2019

İSPİR N., Approximation By Nonlinear Bernstein Type Maximum-Product Operators, Doctorate, Ş.YÜKSEL(Student), 2018

İSPİR N., Lineer olmayan bernstein tip maksimum-çarpım operatörleri ile yaklaşım, Doctorate, Ş.YÜKSEL(Student), 2018

İSPİR N., The Approximation Properties Of Bivariate Schurer-Stancu Type Operators, Postgraduate, G.AKSOY(Student), 2016

İSPİR N., Approximation By Generalized Complex Genuine Szász- Durrmeyer Operators, Doctorate, N.ÇETİN(Student), 2015

İSPİR N., Approximation properties of complex q-balazs-szabados operators, Doctorate, E.YILDIZ(Student), 2014

İSPİR N., Approximation by complex Bernstein-Stancu polynomials in compact disks, Postgraduate, M.ALTINOK(Student), 2013

İSPİR N., Appoximation by complex baskakov operators to analitic functions, Postgraduate, N.MANAV(Student), 2013

İSPİR N., Korovkin-type theorems, Postgraduate, Ş.YÜKSEL(Student), 2012

İSPİR N., Approximation by complex kantorovich-schurer polynomials in compact disks, Postgraduate, H.AĞBULUT(Student), 2012

İSPİR N., Szasz-Durrmeyer operatörleri ile global yaklaşım, Postgraduate, H.ÖZDOĞAN(Student), 2010

İSPİR N., Toplamsal integral tip operatörlerin yaklaşım özellikleri, Doctorate, İ.YÜKSEL(Student), 2006

İSPİR N., Toplumsal integral tipoperatörlerin ağırlıklı yaklaşım özellikleri, Postgraduate, H.MÜCELLA(Student), 2006

İSPİR N., Schurer-szasz operatörleri ile yaklaşım, Postgraduate, T.AZAP(Student), 2005

İSPİR N., Baskakov-Schurer operatörleri ile ağırlıklı yaklaşım, Postgraduate, İ.ÖCAL(Student), 2005

İSPİR N., Rasyonel tip Bernstein operatörleri ile yaklaşım, Postgraduate, M.ÜNSAL(Student), 2005

İSPİR N., Birim dairenin ve üst yarı düzlemin otomorfizm grupları ve Schwarz lemması, Postgraduate, P.EVCİ(Student), 1999

İSPİR N., Bikompleks değişkenli holomorf fonksiyonların cebirleri, Postgraduate, Ö.ÖZMEN(Student), 1995

İSPİR N., Homotopi teorisi ve cauchy integral teoremi, Postgraduate, Ş.KILIÇOĞLU(Student), 1992

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

- I. **Quantitative Estimates of Generalized Boolean Sum Operators of Blending Type**  
Agrawal P. N., İSPİR N., Sidharth M.  
NUMERICAL FUNCTIONAL ANALYSIS AND OPTIMIZATION, vol.39, no.3, pp.295-307, 2018 (SCI-Expanded)
- II. **Approximation by (p,q)-Analogue of Balazs-Szabados Operators**  
Yildiz Ozkan E., İspir N.  
FILOMAT, vol.32, no.6, pp.2257-2271, 2018 (SCI-Expanded)
- III. **Approximation by Bernstein-Chlodowsky operators of max-product kind**  
Güngör Ş. Y., İspir N.  
MATHEMATICAL COMMUNICATIONS, vol.23, no.2, pp.205-225, 2018 (SCI-Expanded)
- IV. **Kantorovich variant of a new kind of q-Bernstein-Schurer operators**  
Ruchi R., İSPİR N., Agrawal P. N.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.40, no.16, pp.5687-5706, 2017 (SCI-Expanded)
- V. **Blending type approximation by q-generalized Boolean sum of Durrmeyer type**

- Sidharth M., İSPİR N., Agrawal P. N.  
 MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.40, no.11, pp.3901-3911, 2017 (SCI-Expanded)
- VI. **A new kind of Bernstein-Schurer-Stancu-Kantorovich-type operators based on q-integers**  
 Chauhan R., İSPİR N., Agrawal P. N.  
 JOURNAL OF INEQUALITIES AND APPLICATIONS, 2017 (SCI-Expanded)
- VII. **BEZIER VARIANT OF MODIFIED SRIVASTAVA-GUPTA OPERATORS**  
 Neer T., İSPİR N., Agrawal P. N.  
 REVISTA DE LA UNION MATEMATICA ARGENTINA, vol.58, no.2, pp.199-214, 2017 (SCI-Expanded)
- VIII. **Quantitative Estimates for GBS Operators of Chlodowsky-Szasz Type**  
 İSPİR N.  
 FILOMAT, vol.31, no.5, pp.1175-1184, 2017 (SCI-Expanded)
- IX. **Quantitative Estimates for Generalized Szasz Operators of Max-Product Kind**  
 GÜNGÖR Ş. Y., İSPİR N.  
 RESULTS IN MATHEMATICS, vol.70, pp.447-456, 2016 (SCI-Expanded)
- X. **GBS Operators of LupaAY-Durrmeyer Type Based on Polya Distribution**  
 Agrawal P. N., İSPİR N., Kajla A.  
 RESULTS IN MATHEMATICS, vol.69, pp.397-418, 2016 (SCI-Expanded)
- XI. **Degree of Approximation for Bivariate Chlodowsky-Szasz-Charlier Type Operators**  
 Agrawal P. N., İSPİR N.  
 RESULTS IN MATHEMATICS, vol.69, pp.369-385, 2016 (SCI-Expanded)
- XII. **Quantitative estimates for a certain bivariate Chlodowsky-Szasz-Kantorovich type operators**  
 İSPİR N., BÜYÜKYAZICI İ.  
 MATHEMATICAL COMMUNICATIONS, vol.21, no.1, pp.31-44, 2016 (SCI-Expanded)
- XIII. **q-Bernstein-Schurer-Durrmeyer type operators for functions of one and two variables**  
 Kajla A., İSPİR N., Agrawal P. N., Goyal M.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.275, pp.372-385, 2016 (SCI-Expanded)
- XIV. **Approximation of B-continuous and B-differentiable functions by GBS operators of q-Bernstein-Schurer-Stancu type**  
 Sidharth M., İSPİR N., Agrawal P. N.  
 TURKISH JOURNAL OF MATHEMATICS, vol.40, no.6, pp.1298-1315, 2016 (SCI-Expanded)
- XV. **GBS operators of Bernstein-Schurer-Kantorovich type based on q-integers**  
 Sidharth M., İSPİR N., Agrawal P. N.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.269, pp.558-568, 2015 (SCI-Expanded)
- XVI. **Approximation properties of Bezier-summation-integral type operators based on Polya-Bernstein functions**  
 Agrawal P. N., İSPİR N., Kajla A.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.259, pp.533-539, 2015 (SCI-Expanded)
- XVII. **Approximation Properties of Complex Modified Genuine Szasz-Durrmeyer Operators**  
 Cetin N., İSPİR N.  
 COMPUTATIONAL METHODS AND FUNCTION THEORY, vol.14, no.4, pp.623-638, 2014 (SCI-Expanded)
- XVIII. **APPROXIMATION BY COMPLEX MODIFIED SZASZ-MIRAKJAN OPERATORS**  
 Cetin N., İSPİR N.  
 STUDIA SCIENTIARUM MATHEMATICARUM HUNGARICA, vol.50, no.3, pp.355-372, 2013 (SCI-Expanded)
- XIX. **Approximation properties of complex q-Balazs-Szabados operators in compact disks**  
 İspir N., Yıldız Özkan E.  
 JOURNAL OF INEQUALITIES AND APPLICATIONS, 2013 (SCI-Expanded)
- XX. **On Kantorovich process of a sequence of the generalized linear positive operators**  
 İSPİR N., ARAL A., Dogru O.  
 NUMERICAL FUNCTIONAL ANALYSIS AND OPTIMIZATION, vol.29, pp.574-589, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. **CONVERGENCE THEOREMS IN ORLICZ AND BOGEL CONTINUOUS FUNCTIONS SPACES BY MEANS OF KANTOROVICH DISCRETE TYPE SAMPLING OPERATORS**  
Ayan S., Ispir N.  
MATHEMATICAL FOUNDATIONS OF COMPUTING, vol.6, no.3, pp.354-368, 2023 (ESCI)
- II. **Approximation of Jain Operators by Statistical Convergence**  
İSPİR N., Deo N., Bhardwaj N.  
Thai Journal of Mathematics, vol.19, no.4, pp.1187-1197, 2021 (ESCI)
- III. **SUMMATION-INTEGRAL TYPE OPERATORS BASED ON LUPAS-JAIN FUNCTIONS**  
Manav N., İSPİR N.  
KRAGUJEVAC JOURNAL OF MATHEMATICS, vol.45, no.2, pp.309-322, 2021 (ESCI)
- IV. **Bivariate  $q$ -Bernstein-Chlodowsky-Durrmeyer type operators and the associated GBS operators**  
Garg T., İSPİR N., Agrawal P. N.  
ASIAN-EUROPEAN JOURNAL OF MATHEMATICS, vol.13, no.5, 2020 (ESCI)
- V. **Degree of approximation of genuine Lupas-Durrmeyer operators**  
Manav N., İSPİR N.  
TBILISI MATHEMATICAL JOURNAL, vol.12, no.2, pp.119-135, 2019 (ESCI)
- VI. **APPROXIMATION BY THE SUMMATION INTEGRAL TYPE OPERATORS BASED ON LUPAS-SZASZ BASIS FUNCTIONS**  
Manav N., İSPİR N.  
JOURNAL OF SCIENCE AND ARTS, no.4, pp.853-868, 2018 (ESCI)
- VII. **Blending Type Approximation by Bivariate Bernstein-Kantorovich operators**  
Deshwal S., İSPİR N., Agrawal P.  
Applied Mathematics & Information Sciences, vol.11, no.2, pp.423-432, 2017 (Scopus)
- VIII. **Shape preserving properties of generalized Szász operators of max-product kind**  
GÜNGÖR Ş. Y., İSPİR N.  
General Mathematics, vol.1, no.24, pp.71-79, 2016 (Peer-Reviewed Journal)
- IX. **Approximation properties of Lupas-Kantorovich operators based on Polya distribution**  
Agrawal P. N., İSPİR N., Kajla A.  
RENDICONTI DEL CIRCOLO MATEMATICO DI PALERMO, vol.65, no.2, pp.185-208, 2016 (ESCI)
- X. **Shape preserving properties of generalized Szász operators of max-product kind**  
Güngör Ş. Y., İSPİR N.  
General Mathematics, vol.24, pp.71-79, 2016 (Peer-Reviewed Journal)
- XI. **The Exact Order of Approximation for Bivariate Complex Bernstein-Schurer Polynomials**  
İSPİR N., GÜNGÖR Ş. Y.  
EUROPEAN JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.9, no.3, pp.322-332, 2016 (ESCI)
- XII. **Approximation by blending type operators based on Szasz-Lupaş basis functions**  
MANAV N., İSPİR N.  
General Mathematics, vol.24, pp.105-118, 2016 (Peer-Reviewed Journal)
- XIII. **On a General Class of  $q$  Rational Type Operators**  
İSPİR N.  
Mathematica Moravica, vol.19, no.2, pp.19-33, 2015 (Peer-Reviewed Journal)
- XIV. **Approximation by modified complex Szasz Mirakjan operators**  
İSPİR N.  
AZERBAIJAN JOURNAL OF MATHEMATICS, vol.3, no.2, pp.95-107, 2013 (Scopus)
- XV. **A Statistical Approximation by the Generalized Kantorovich Bernstein Type Rational Operators**  
İSPİR N., Vijay G.  
Southeast Asian Bulletin of Mathematics, vol.32, no.1, pp.87-97, 2008 (ESCI)
- XVI. **On the Kantorovich Variant of Generalized Bernstein Type Rational functions**  
Gupta V., İSPİR N.

- DEMONSTRATIO MATHEMATICA, vol.39, no.1, pp.117-130, 2006 (ESCI)
- XVII. **On the Bezier variant of Srivastava Gupta operators**  
İSPİR N., YÜKSEL İ.  
Applied Mathematics E-Notes, vol.5, pp.129-137, 2005 (Scopus)
- XVIII. **Rate of convergence by certain Bezier type operators for bounded variation functions**  
İSPİR N., YÜKSEL İ.  
Int. J. Math. Sci., vol.4, no.2, pp.329-339, 2005 (Peer-Reviewed Journal)
- XIX. **Rate of Convergence by Certain Bezier type Operators for Bounded Variation**  
İSPİR N., YÜKSEL İ.  
Int. J. Math. Sci., vol.4, no.2, pp.329-339, 2005 (Peer-Reviewed Journal)
- XX. **On simultaneous approximation for some modified Bernstein type operators**  
Vijay G., İSPİR N.  
International Journal of Mathematics and Mathematical Sciences, vol.71, pp.3951-3958, 2004 (Scopus)
- XXI. **Weighted Approximation by modified Favard-Szasz operators**  
İSPİR N.  
Int. Math. J., vol.3, no.10, pp.1053-1060, 2003 (Peer-Reviewed Journal)
- XXII. **Approximation by generalized Balasz type rational functions**  
İSPİR N., ATAKUT Ç.  
International Journal of Computational and Numerical Analysis and Applications, vol.4, no.3, pp.297-316, 2003 (Peer-Reviewed Journal)
- XXIII. **The order of approximation by certain linear positive operators.**  
ATAKUT Ç., İSPİR N.  
Mathematica Balkanica, vol.15, pp.25-34, 2001 (Peer-Reviewed Journal)
- XXIV. **Approximation by Balasz type rational functions in weighted spaces.**  
İSPİR N., ATAKUT Ç.  
Hadronic Journal, vol.24, no.3, pp.301-316, 2001 (Peer-Reviewed Journal)
- XXV. **Approximation by modified Bernstein- Balasz type rational functions**  
İSPİR N.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.49, pp.87-93, 2000 (Peer-Reviewed Journal)
- XXVI. **Some subring properties of the ring of holomorphic functions of a bicomplex variable.**  
İSPİR N.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.132, no.3, pp.641-653, 1999 (ESCI)
- XXVII. **On a sequence of linear positive operators in weighted spaces**  
Gadjiev A., İSPİR N.  
Proc. Inst. Math. Mech.(Proceedings of the Institute of Mathematics and Mechanics ), vol.11, no.12, pp.46-56, 1999 (Peer-Reviewed Journal)
- XXVIII. **On rings of holomorphic functions of a bicomplex variables**  
İSPİR N.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.10, no.4, pp.601-609, 1997 (ESCI)
- XXIX. **Holomorfik fonksiyonlar halkasının spektrumları üzerine**  
İSPİR N., ÖZKIN İ. K.  
Jour. Sci. Eng. Erciyes Univ, vol.16, no.1, pp.965-975, 1990 (Peer-Reviewed Journal)
- XXX. **Some subring properties of the ring of holomorphic functions on a non-empty subset of an open Riemann surface.**  
İSPİR N., ÖZKIN İ. K.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.39, pp.1-4, 1990 (ESCI)
- XXXI. **Some properties which a ring of holomorphic functions on non-empty subset of an open Riemann surface might have..**  
İSPİR N., ÖZKIN İ. K.

## Refereed Congress / Symposium Publications in Proceedings

- I. **Rate of Convergence by Phillips Operators Involving Appell Polynomials**  
Güngör Ş. Y., İspir N.  
Third International Conference of Mathematical Sciences - ICMS 2019, İstanbul, Turkey, 4 - 08 September 2019,  
pp.59
- II. **Genelleştirilmiş Szasz-Sheffer Operatörleri ile Integrellenebilir Fonksiyonlara Yaklaşım**  
Koç T., İSPİR N.  
14. Ankara Matematik Günleri (AMG 2019), Ankara, Turkey, 28 - 29 June 2019
- III. **İki Değişkenli Chlodowsky-Szasz-Sheffer Operatörleri ile Yaklaşım Derecesi**  
İSPİR N.  
13. Ankara Matematik Günleri ", Ankara, Turkey, 27 - 28 April 2018
- IV. **Approximation by Bivariate Lupa and Szasz-Brenke type Operators**  
İSPİR N.  
7th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA), Kyiv, Ukraine, 28 - 31  
August 2018, vol.2037
- V. **Approximation by Generalized Bleimann-Butzer-Hahn Operators of Max-Product Kind**  
Güngör Ş. Y., İspir N.  
The 11th Congress of International Society for Analysis, its Applications and Computations - ISAAC, Vaxjö, Sweden,  
14 - 18 August 2017, pp.16
- VI. **Shape Preserving Properties of Generalized Szász Operators of Max Product Kind**  
Güngör Ş. Y., İspir N.  
The 12th International Conference on Approximation Theory and its Applications - ICATA, Sibiu, Romania, 26 - 29  
May 2016, vol.24, pp.71-79
- VII. **Shape Preserving Properties of Generalized Sz aszOperators of Max Product Kind**  
Güngör Ş. Y., İSPİR N.  
The 12th International Conference on Approximation Theory and its Applications, Sibiu, Romania, 26 - 29 May  
2016
- VIII. **APPROXIMATION BLENDING TYPE OPERATORS BASED ON LUPAS SZASZ FUNCTIONS**  
Manav N., İSPİR N.  
The 12th International Conference on Approximation Theory and its Applications, Sibiu, Romania, 26 - 29 May  
2016
- IX. **Approximation by Max-Product Type Bernstein-Chlodowsky Operators**  
Güngör Ş. Y., İspir N.  
10. Ankara Matematik Günleri Sempozyumu - AMG, Ankara, Turkey, 11 - 12 June 2015, pp.61
- X. **Maksimum-Carpm Tip Bernstein-ChlodowskyOperatörlerinin Yaklaşım Özellikleri**  
Güngör Ş. Y., İSPİR N.  
10. Ankara Matematik Günleri Ulusal Sempozyumu, Ankara, Turkey, 11 - 12 June 2015
- XI. **Polya Dağılımlı Lupas-Kantorovich tip GBS operatörleri ile Yaklaşım**  
İSPİR N.  
10. Ankara Matematik Günleri Ulusal Sempozyumu, Ankara, Turkey, 11 - 12 June 2015
- XII. **Approximation by Modified Complex Szasz-Mirakjan Operators**  
İSPİR N.  
Actual Problems of Mathematics and Informatics, 29 - 31 May 2013
- XIII. **Approximation by complex genuine Szasz Durrmeyer operators in compact disks**  
çetin n., İSPİR N.  
International Conference on Actual Problems of Mathematics and Informatics, Dedicated to the 90th Anniversary

of Haydar Aliyev, Baku, Azerbaijan, 29 - 31 May 2013

**XIV. Rate of Convergence of Mastroianni Kantorovich-Type Operators for Absolutely Continuous Functions**

İSPİR N.

XX. Ulusal Matematik Sempozyumu, Atatürk Üniversitesi, Erzurum, Erzurum, Turkey, 3 - 06 September 2007, pp.375-383

**XV. Szasz Tipi Operatörlerle Polinom Ağırlıklı uzaylarda Yaklaşım**

İSPİR N.

XIV. Ulusal Matematik Sempozyumu, Eskişehir, Turkey, 14 - 17 September 2001, vol.3, pp.421-425

**XVI. m-kat diziler Uzayında Lineer pozitif operatör Dizilerinin yakınsaklık Koşulları**

İSPİR N.

XI. Ulusal Matematik Sempozyumu, Isparta, Turkey, 7 - 11 September 1998

**XVII. Analitik Fonksiyonların Ar altuzaylarında Lineer k-pozitif Operatör Dizilerinin Yakınsaklığı**

İSPİR N.

II.Kızılırmak Uluslararası Fen Bilimleri Kongresi, Kırıkkale, Turkey, 20 - 22 May 1998

**XVIII. Holomorfik Fonksiyonları Spektrumları ve Riemann Yüzeylerinin bir Karakterizasyonu**

İSPİR N.

VI. Ulusal Matematik Sempozyumu, Magosa, Cyprus (Kkctc), 8 - 12 September 1993

## **Metrics**

Publication: 69

Citation (WoS): 225

Citation (Scopus): 210

H-Index (WoS): 10

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