

# Prof. İSMAİL KÖMBE

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: ABC-4828-2020

ScopusID: 23097709800

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## Education Information

Doctorate, The University of Memphis, Mathematics, United States Of America 1999 - 2003

Postgraduate, The University of Pittsburgh, Mathematics, United States Of America 1993 - 1995

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 1986 - 1990

## Dissertations

Doctorate, Linear and Non-Linear Partial Differential Equations with Singular Potentials, The University of Memphis, 2003

## Academic Titles / Tasks

Professor, Istanbul Commerce University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2011 - Continues

Associate Professor, Oklahoma City University, College Of Art And Science, Matematik, 2007 - 2011

Assistant Professor, Oklahoma City University, College Of Art And Science, Matematik, 2004 - 2007

Assistant Professor, University of Missouri - Columbia, College Of Arts And Science, Matematik, 2003 - 2004

## Academic and Administrative Experience

Istanbul Commerce University, 2019 - Continues

Istanbul Commerce University, 2015 - Continues

Istanbul Commerce University, 2014 - Continues

Istanbul Commerce University, 2014 - Continues

## Courses

Mathematical Analysis-1(Elektrik-Elektronik Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Mathematical Analysis-1(Mekatronik Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Engineering Mathematics-1 (Bilgisayar Mühendisliği), Undergraduate, 2021 - 2022

Engineering Mathematics-2 (Endüstri Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Mathematical Analysis-2(Elektrik-Elektronik Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Mathematical Analysis-1(Bilgisayar Mühendisliği), Undergraduate, 2021 - 2022  
Engineering Mathematics-2 (Bilgisayar Mühendisliği), Undergraduate, 2021 - 2022  
Mathematical Analysis-2(Mekatronik Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Mathematical Analysis-1(Endüstri Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Mathematical Analysis-2(Endüstri Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Engineering Mathematics-1 (Endüstri Mühendisliği), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Mathematical Analysis-2(Bilgisayar Mühendisliği), Undergraduate, 2021 - 2022  
Matematik Analiz-4, Undergraduate, 2020 - 2021  
Matematik Analiz-3, Undergraduate, 2020 - 2021  
Ölçüm Teorisi, Postgraduate, 2019 - 2020, 2016 - 2017, 2014 - 2015, 2012 - 2013  
Matematik Analiz-2, Undergraduate, 2019 - 2020  
Matematik Analiz-1, Undergraduate, 2019 - 2020  
MATHEMATICAL ANALYSIS I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
MATHEMATICAL ANALYSIS II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
Engineering Mathematics I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Engineering Mathematics II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Geometrik Analiz, Doctorate, 2017 - 2018  
İLERİ KISMİ DİFERANSİYEL DENKLEMLER, Postgraduate, 2016 - 2017, 2012 - 2013  
Diferansiyel Geometri, Undergraduate, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012  
KISMİ TÜREVLİ DENKLEMLER, Undergraduate, 2015 - 2016, 2012 - 2013, 2011 - 2012  
İleri Mühendislik Matematiği, Postgraduate, 2015 - 2016  
Mesleki İngilizce II, Undergraduate, 2014 - 2015, 2013 - 2014, 2011 - 2012  
Mathematics II, Undergraduate, 2014 - 2015  
Matematik Analiz IV, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013  
Kısmi Türevli Denklemler I, Undergraduate, 2014 - 2015, 2013 - 2014  
Mathematics I, Undergraduate, 2014 - 2015  
Mesleki İngilizce I, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013  
Sobolev Uzayları ve Geometrik Eşitsizlikler, Doctorate, 2013 - 2014  
Matematik I, Undergraduate, 2013 - 2014  
Diferansiyel Geometri, Undergraduate, 2013 - 2014  
Matematik Analiz III, Undergraduate, 2013 - 2014, 2012 - 2013  
Business Statistics, Associate Degree, 2012 - 2013, 2011 - 2012  
Reel Analiz I, Undergraduate, 2012 - 2013  
Linear Algebra, Undergraduate, 2012 - 2013  
Mesleki İngilizce I, Associate Degree, 2011 - 2012  
Uygulamalı Matematik II, Postgraduate, 2011 - 2012  
Reel Analiz, Undergraduate, 2011 - 2012  
Ayrık Matematik, Undergraduate, 2011 - 2012  
Uygulamalı Matematik I, Postgraduate, 2011 - 2012  
Mühendislik Matematiği , Undergraduate, 2011 - 2012  
Matematiksel İstatistik, Undergraduate, 2011 - 2012

## Advising Theses

İSMAİL K., Bazı doğrusal olmayan kısmi diferansiyel denklemler, Doctorate, R.TELLİOĞLU(Student), 2022  
İSMAİL K., Riemann manifoldu üzerinde bazı kısmi diferansiyel denklemler, Doctorate, S.BAKIM(Student), 2021  
İSMAİL K., Baouendi-Grushin operatörüne ilişkilendirilmiş lineer olmayan singüler parabolik denklemler, Postgraduate,

E.GÜRSU(Student), 2019

İSMAİL K., Heisenberg grubunda hardy, rellich eşitsizlikleri ve bu eşitsizliklerin bazı uygulamaları, Doctorate,

A.YENER(Student), 2017

İSMAİL K., Heisenberg grubunda ısı denklemi, Postgraduate, A.YENER(Student), 2013

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

- I. **Weighted Hardy type inequalities with Robin boundary conditions**  
Yener A., Kömbe İ.  
DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS - SERIES S, vol.17, no.5&6, pp.1889-1898, 2024 (SCI-Expanded)
- II. **Scaling and instantaneous blow up**  
Goldstein G. R., Goldstein J. A., KÖMBE İ., Rhandi A.  
Quaestiones Mathematicae, vol.47, no.sup1, pp.169-177, 2024 (SCI-Expanded)
- III. **Non-existence results for p-laplacian parabolic problems on the heisenberg group Hn**  
Goldstein G. R., Goldstein J. A., KÖMBE İ.  
Discrete and Continuous Dynamical Systems - Series S, vol.16, no.9, pp.2354-2363, 2023 (SCI-Expanded)
- IV. **Nonexistence of positive solutions for nonlinear parabolic Robin problems and Hardy–Leray inequalities**  
Goldstein G. R., Goldstein J. A., KÖMBE İ., Tellioglu R.  
Annali di Matematica Pura ed Applicata, vol.201, no.6, pp.2927-2942, 2022 (SCI-Expanded)
- V. **Doubly nonlinear parabolic equations with Robin boundary conditions**  
KÖMBE İ., Balekoğlu R. T.  
Mathematical Methods in the Applied Sciences, vol.45, no.16, pp.9386-9395, 2022 (SCI-Expanded)
- VI. **Nonexistence results for parabolic equations involving the p -Laplacian and Hardy–Leray-type inequalities on Riemannian manifolds**  
Goldstein G. R., Goldstein J. A., KÖMBE İ., Bakim S.  
Journal of Evolution Equations, vol.21, no.3, pp.3675-3701, 2021 (SCI-Expanded)
- VII. **Fast diffusion equations on riemannian manifolds**  
Bakim S., Goldstein G. R., Goldstein J. A., KÖMBE İ.  
Differential and Integral Equations, vol.33, no.9-10, pp.527-554, 2020 (SCI-Expanded)
- VIII. **A general approach to weighted Lp rellich type inequalities related to greiner operator**  
KÖMBE İ., YENER A.  
Communications on Pure and Applied Analysis, vol.18, no.2, pp.869-886, 2019 (SCI-Expanded)
- IX. **Improved hardy and rellich type inequalities with two weight functions**  
Ahmetolan S., KÖMBE İ.  
Mathematical Inequalities and Applications, vol.21, no.3, pp.885-896, 2018 (SCI-Expanded)
- X. **General weighted hardy type inequalities related to Baouendi-Grushin operators**  
KÖMBE İ., YENER A.  
Complex Variables and Elliptic Equations, vol.63, no.3, pp.420-436, 2018 (SCI-Expanded)
- XI. **A general approach to weighted Rellich type inequalities on Carnot groups**  
Goldstein J. A., KÖMBE İ., YENER A.  
Monatshefte fur Mathematik, vol.186, no.1, pp.49-72, 2018 (SCI-Expanded)
- XII. **A unified approach to weighted Hardy type inequalities on Carnot groups**  
Goldstein J. A., KÖMBE İ., YENER A.  
Discrete and Continuous Dynamical Systems- Series A, vol.37, no.4, pp.2009-2021, 2017 (SCI-Expanded)
- XIII. **Weighted rellich type inequalities related to baouendi-grushin operators**  
KÖMBE İ., YENER A.  
Proceedings of the American Mathematical Society, vol.145, no.11, pp.4845-4857, 2017 (SCI-Expanded)
- XIV. **Hardy and rellich type inequalities with two weight functions**

- Ahmetolan S., KÖMBE İ.  
Mathematical Inequalities and Applications, vol.19, no.3, pp.937-948, 2016 (SCI-Expanded)
- XV. **Weighted Hardy and Rellich type inequalities on Riemannian manifolds**  
KÖMBE İ., YENER A.  
Mathematische Nachrichten, vol.289, no.8-9, pp.994-1004, 2016 (SCI-Expanded)
- XVI. **Hardy and rellich-type inequalities with remainders for baouendi-grushin vector fields**  
KÖMBE İ.  
Houston Journal of Mathematics, vol.41, no.3, pp.849-874, 2015 (SCI-Expanded)
- XVII. **On the nonexistence of positive solutions to doubly nonlinear equations for baouendi-grushin operators**  
KÖMBE İ.  
Discrete and Continuous Dynamical Systems- Series A, vol.33, no.11-12, pp.5167-5176, 2013 (SCI-Expanded)
- XVIII. **Hardy-Poincaré, Rellich and uncertainty principle inequalities on Riemannian manifolds**  
KÖMBE İ., ÖZaydin M.  
Transactions of the American Mathematical Society, vol.365, no.10, pp.5035-5050, 2013 (SCI-Expanded)
- XIX. **A sharp uncertainty principle and hardy-poincaré inequalities on sub-riemannian manifolds**  
Ahmetolan S., KÖMBE İ.  
Mathematical Inequalities and Applications, vol.15, no.2, pp.457-467, 2012 (SCI-Expanded)
- XX. **Improved hardy and rellich inequalities on riemannian manifolds**  
KÖMBE İ., ÖZaydin M.  
Transactions of the American Mathematical Society, vol.361, no.12, pp.6191-6203, 2009 (SCI-Expanded)
- XXI. **The Hardy inequality and nonlinear parabolic equations on Carnot groups**  
Goldstein J. A., KÖMBE İ.  
Nonlinear Analysis, Theory, Methods and Applications, vol.69, no.12, pp.4643-4653, 2008 (SCI-Expanded)
- XXII. **Gaussian estimates and instantaneous blowup**  
Goldstein J. A., KÖMBE İ.  
Positivity, vol.12, no.1, pp.75-82, 2008 (SCI-Expanded)
- XXIII. **Nonlinear degenerate parabolic equations for Baouendi-Grushin operators**  
KÖMBE İ.  
Mathematische Nachrichten, vol.279, no.7, pp.756-773, 2006 (SCI-Expanded)
- XXIV. **On the nonexistence of positive solutions to nonlinear degenerate parabolic equations with singular coefficients**  
KÖMBE İ.  
International Journal of Phytoremediation, vol.85, no.5, pp.467-478, 2006 (SCI-Expanded)
- XXV. **Nonlinear parabolic equations with singular coefficient and critical exponent**  
Goldstein G. R., Goldstein J. A., KÖMBE İ.  
International Journal of Phytoremediation, vol.84, no.6, pp.571-583, 2005 (SCI-Expanded)
- XXVI. **The linear heat equation with highly oscillating potential**  
KÖMBE İ.  
Proceedings of the American Mathematical Society, vol.132, no.9, pp.2683-2691, 2004 (SCI-Expanded)
- XXVII. **Doubly nonlinear parabolic equations with singular lower order term**  
KÖMBE İ.  
Nonlinear Analysis, Theory, Methods and Applications, vol.56, no.2, pp.185-199, 2004 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Sharp weighted rellich and uncertainty principle inequalities on carnot groups**  
KÖMBE İ.  
Communications in Applied Analysis, vol.14, no.2, pp.251-272, 2010 (Scopus)
- II. **Cauchy-Dirichlet problem for the nonlinear degenerate parabolic equations**

KÖMBE İ.

Abstract and Applied Analysis, vol.2005, no.6, pp.607-617, 2005 (Scopus)

III. **Nonlinear degenerate parabolic equations with singular lower-order term**

Goldstein J. A., KÖMBE İ.

Advances in Differential Equations, vol.8, no.10, pp.1153-1192, 2003 (Scopus)

**Refereed Congress / Symposium Publications in Proceedings**

I. **Nonlinear parabolic equations with Robin boundary conditions and Hardy-Leray type inequalities**

Goldstein G. R., Goldstein J. A., KÖMBE İ., Balekoğlu R. T.

AMS Special Session Celebrating M.M. Rao's Many Mathematical Contributions as he Turns 90 Years Old, 2019, California, United States Of America, 9 - 10 November 2019, vol.774, pp.55-70