

## Prof. HÜSEYİN GÖKSU

### Personal Information

**Office Phone:** [+90 242 310 6384](tel:+902423106384)

**Email:** [hgoksu@akdeniz.edu.tr](mailto:hgoksu@akdeniz.edu.tr)

**Web:** <https://avesis.akdeniz.edu.tr/1687>

**Address:** Akdeniz Üniversitesi Mühendislik Fakültesi Elektrik Elektronik Mühendisliği Bölümü Antalya Tel: 0242-3106384

### International Researcher IDs

ORCID: 0000-0002-3162-4874

Publons / Web Of Science ResearcherID: C-3100-2016

ScopusID: 8974312000

Yoksis Researcher ID: 128431

### Education Information

Doctorate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2002 - 2006

Postgraduate, University of Missouri, Department Of Electrical And Computer Engineering, Elektrik Mühendisliği, United States Of America 2002 - 2004

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 1997 - 2002

Undergraduate, Middle East Technical University, Fizik, Turkey 1993 - 1997

Undergraduate, Hacettepe University, Tıp Fakültesi, Turkey 1991 - 1993

### Foreign Languages

German, B1 Intermediate

English, C2 Mastery

### Certificates, Courses and Trainings

Science and Technology Policy, NATO Advanced Study Institute, Scottish Universities Summer Schools in Physics, Laser Plasma Interactions, NATO, 2005

IT, NATO Advanced Study Institute, Dynamics of Complex Interconnected Systems: Networks and Bioprocesses, NATO, 2005

IT, NATO Advanced Study Institute From Cells To Proteins: Imaging Nature Across Dimensions, NATO, 2004

Science and Technology Policy, NATO Advanced Research Workshop on Continuum Models and Discrete Systems, NATO, 2003

IT, NATO Advanced Study Institute Neural Networks for Instrumentation, Measurement and Related Industrial Applications, NATO, 2001

### Dissertations

Doctorate, İşlemsel Zekanın Elektromanyetik Problemlere Uygulanması, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik, 2006

Postgraduate, Global Optimizasyon Yöntemiyle Elektromanyetik Ters Problem Çözümü, Suleyman Demirel University,

## Research Areas

Information Systems, Communication and Control Engineering, Communication Engineering, Radar Theory, Robotics and Mechatronics Systems, Computer Vision, Human and Robot Interaction, Signal Processing, Signal Processing Theory and Methods, Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Pattern Recognition and Image Processing, Neural Networks, Biomedical Engineering, Biosignal Processing, Biosignal Processing, Electrical and Electronics Engineering, Electromagnetic, Wave Propagation and Remote Sensing, Electric and Magnetic Fields, Electromagnetic Waves, Antennas and Propagation, Physics, Electromagnetism, Acoustics, Heat Transfer, Classical Mechanics and Fluid Dynamics, Acoustics, Natural Sciences, Engineering and Technology

## Academic Titles / Tasks

Professor, Akdeniz University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2019 - Continues

Associate Professor, Akdeniz University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2010 - 2019

Assistant Professor, Akdeniz University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2007 - 2010

Instructor, Suleyman Demirel University, Rektörlük, Deprem Araştırma Merkezi, Tekmer, Teknokent, 2002 - 2007

Research Assistant, University of Missouri, Department Of Electrical And Computer Engineering, Applied Computational Intelligence Lab., 2002 - 2004

Lecturer, Vanderbilt University, Graduate School, Department Of Physics And Astronomy, 1998 - 2000

## Academic and Administrative Experience

Akdeniz University, 2019 - Continues

Akdeniz University, Elektromanyetik Alanlar Ve Mikrodalga Tekniği Anabilim Dalı, 2007 - 2011

Akdeniz University, Faculty of Engineering, 2007 - 2008

## Courses

Computer Vision, Undergraduate, 2021 - 2022

Graduation Project II, Undergraduate, 2021 - 2022

Radar Systems, Undergraduate, 2020 - 2021

Uygulamalı Evrensel Eniyileme, Doctorate, 2021 - 2022

Graduation Project I, Undergraduate, 2021 - 2022

Physics I, Undergraduate, 2021 - 2022

Physics II, Undergraduate, 2020 - 2021

Makine Öğrenmesi, Doctorate, 2020 - 2021

Concepts of Modern Physics, Undergraduate, 2020 - 2021

Deep Learning, Undergraduate, 2020 - 2021

## Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Doçentlik Sözlü Sınavı, Niğde Ömer Halisdemir Üniversitesi, July,

2020

Associate Professor Exam, Doçentlik Jürisi, Üniversitelerarası Kurum, March, 2020

Associate Professor Exam, Doçentlik Jürisi, Üniversitelerarası Kurum, November, 2019

Associate Professor Exam, Doçentlik Jürisi, Üniversitelerarası Kurum, November, 2019

Associate Professor Exam, Doçentlik Jürisi, Üniversitelerarası Kurum, November, 2019

Associate Professor Exam, Doçentlik Jürisi, Üniversitelerarası Kurum, November, 2019

Doctorate, Sosyal Bilimler Enstitüsü, Ömür Tosun, Tez Savunma Jürisi, Akdeniz Üniversitesi, November, 2012

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

- I. **Detection and Identification of Vehicles Based on Their Spark-Free Unintended Electromagnetic Emissions**  
GÖKSU H., Wunsch D. C., Dong X., KÖKCE A., Beetner D. G.  
IEEE TRANSACTIONS ON ELECTROMAGNETIC COMPATIBILITY, vol.60, no.5, pp.1594-1597, 2018 (SCI-Expanded)
- II. **BCI oriented EEG analysis using log energy entropy of wavelet packets**  
GÖKSU H.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.44, pp.101-109, 2018 (SCI-Expanded)
- III. **Vehicle speed measurement by on-board acoustic signal processing**  
GÖKSU H.  
MEASUREMENT & CONTROL, vol.51, no.5-6, pp.138-149, 2018 (SCI-Expanded)
- IV. **EEG based epileptiform pattern recognition inside and outside the seizure states**  
GÖKSU H.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.43, pp.204-215, 2018 (SCI-Expanded)
- V. **Engine Speed-Independent Acoustic Signature for Vehicles**  
GÖKSU H.  
MEASUREMENT & CONTROL, vol.51, no.3-4, pp.94-103, 2018 (SCI-Expanded)
- VI. **Flow Measurement by Wavelet Packet Analysis of Sound Emissions**  
GÖKSU H.  
MEASUREMENT & CONTROL, vol.51, no.3-4, pp.104-112, 2018 (SCI-Expanded)
- VII. **Ground moving target recognition using log energy entropy of wavelet packets**  
GÖKSU H.  
ELECTRONICS LETTERS, vol.54, no.4, pp.233-235, 2018 (SCI-Expanded)
- VIII. **Non-invasive detection of the anaerobic threshold by a neural network model of the heart rate-work rate relationship**  
Erdogan A., ÇETİN C., GÖKSU H., Guner R., BAYDAR M. L.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART P-JOURNAL OF SPORTS ENGINEERING AND TECHNOLOGY, vol.223, no.P3, pp.109-115, 2009 (SCI-Expanded)
- IX. **Investigation of 3D electromagnetic field distribution for dynamic polarization diversity**  
HELHEL S., GÖKSU H., ÖZEN Ş.  
IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, vol.7, pp.171-174, 2008 (SCI-Expanded)
- X. **Investigation of GSM Signal Variation Depending on Weather Conditions**  
Helhel S., Özen Ş., Göksu H.  
Progress in Electromagnetic Research PIER B, vol.1, pp.147-157, 2008 (SCI-Expanded)
- XI. **Detection and identification of vehicles based on their unintended electromagnetic emissions**  
DONG X., WENG H., BEETNER D. G., HUBING T. H., WUNSCH D. C., NOLL M., GOKSU H., MOSS B.  
IEEE TRANSACTIONS ON ELECTROMAGNETIC COMPATIBILITY, vol.48, no.4, pp.752-759, 2006 (SCI-Expanded)
- XII. **Design of a broadband microwave amplifier using neural performance data sheets and very fast simulated reannealing**  
CENGİZ Y., GOKSU H., GUNES F.  
ADVANCES IN NEURAL NETWORKS - ISSN 2006, PT 3, PROCEEDINGS, vol.3973, pp.815-820, 2006 (SCI-Expanded)

- XIII. **Music composition using Genetic Algorithms (GA) and Multilayer Perceptrons (MLP)**  
Goksu H., Pigg P., Dixit V.  
ADVANCES IN NATURAL COMPUTATION, PT 3, PROCEEDINGS, vol.3612, pp.1242-1250, 2005 (SCI-Expanded)
- XIV. **Application of very fast simulated reannealing (VFSR) to low power design**  
MANZAK A., Goksu H.  
EMBEDDED COMPUTER SYSTEMS: ARCHITECTURES, MODELING, AND SIMULATION, vol.3553, pp.308-313, 2005 (SCI-Expanded)
- XV. **Solution of the inverse electromagnetic problem of spontaneous potential (SP) by very fast simulated reannealing (VFSR)**  
Goksu H., KAYA M., KOKCE A.  
ADVANCES IN NATURAL COMPUTATION, PT 2, PROCEEDINGS, vol.3611, pp.618-621, 2005 (SCI-Expanded)
- XVI. **Neural networks applied to electromagnetic compatibility (EMC) simulations**  
Goksu H., WUNSCH D.  
ARTIFICIAL NEURAL NETWORKS AND NEURAL INFORMATION PROCESSING - ICAN/ICONIP 2003, vol.2714, pp.1057-1063, 2003 (SCI-Expanded)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **An Efficient Voltage Scheduling Algorithm for Temperature Minimization**  
MANZAK A., GÖKSU H.  
International Symposium on Computing in Science & Engineering, ISCSE-2010, İzmir, Turkey, 3 - 05 June 2010, pp.810-812
- II. **Residential Power-Frequency Magnetic Fields: Measurements and Exposure Analysis**  
HELHEL S., ÖZEN Ş., GÖKSU H.  
IKECCO-2007, International Kyrgyz-Kazak Electronics & Computer Conference, Bishkek, Kazakhstan, 20 - 21 October 2007, pp.1
- III. **Residential Power-Frequency Magnetic Fields: Measurements and Exposure Analysis**  
ÖZEN Ş., HELHEL S., GÖKSU H.  
IKECCO-2007, INTERNATIONAL KYRGYZ-KAZAK ELECTRONICS AND COMPUTER CONFERENCE, Almaty, Azerbaijan, 18 - 19 October 2007
- IV. **Residential Power-Frequency Magnetic Fields: MeasurementsAnd Exposure Analysis**  
HELHEL S., ÖZEN Ş., GÖKSU H.  
International Kyrgyz - Kazak Electronics and Computer Conference, Kazakhstan, 1 - 04 October 2007, vol.1, no.1, pp.1
- V. **Does partial recapitulation occur in the development of human heart?**  
GÖKSU EROL A. Y., GÖKSU H., Arıkan S.  
NATO ASI (ADVANCED STUDY INSTITUTE) Meeting: Evolution from Cellular to Social Scales konferansı, Geilo, Norway, 10 - 20 April 2007, pp.13
- VI. **Heuristic Approach to Optimization of a Microwave Amplifier**  
CENGİZ Y., GÜNEŞ F., GÖKSU H.  
IEEE International Symposium & USNC/URSI National Radio Meeting, Albuquerque, United States Of America, 9 - 14 July 2006, pp.803
- VII. **Electromagnetic Source Identification using MLP**  
GÖKSU H.  
NATO-Advanced Study Institute, Scottish Universities Summer Schools in Physics, Laser Plasma Interactions, St. Andrews, United Kingdom, 14 - 27 August 2005, pp.1
- VIII. **Machine Vision for Object Tracking and Obstacle Identification**  
Aktaş K., GÖKSU H.  
NATO-Advanced Study Institute, Scottish Universities Summer Schools in Physics, Laser Plasma Interactions, St. Andrews, United Kingdom, 14 - 27 August 2005, pp.1

- IX. **Quantum Theory and Interacting Ambiguities**  
GÖKSU H.  
3rd International Workshop on Pseudo-Hermitian Hamiltonians in Quantum Physics, İstanbul, Turkey, 20 - 22 June 2005, pp.1
- X. **Neural Networks Based Sensor Fusion for Autonomous Robot Navigation**  
GÖKSU H.  
Geilo NATO Advanced Study Institute 2005, Geilo, Norway, 11 - 21 April 2005, pp.1
- XI. **Electromagnetic Detection and Identification of Automobiles**  
HUBING T. H., BEETNER D. G., DONG X., WENG H., NOLL M., GÖKSU H., MOSS B., WUNSCH D. C.  
European Electromagnetics Symposium, EUROEM'04, Magdeburg, Germany, 12 - 16 July 2004, pp.1
- XII. **Information Theoretical Sliding Window Optimization Applied to Discretization of Continuous Signals**  
GÖKSU H., WUNSCH D. C.  
NATO- Advanced Research Workshop on Continuum Models and Discrete Systems CMDS-10, Shores, Israel, 30 June - 04 July 2003, pp.1
- XIII. **FDTD data extrapolation using multilayer perceptron (MLP)**  
Göksu H., POMMERENKE D., WUNSCH D.  
IEEE Symposium on Electromagnetic Compatibility (EMC 2003), Massachusetts, United States Of America, 18 - 22 August 2003, pp.735-737

## Other Publications

- I. **Electromagnetic Pulse (EMP) Generation Mechanism, Technische Berichte F.E.98.2. Application Oriented Research And Developments, Hochschule für Technik, Wirtschaft und Verwaltung Zurich, Switzerland**  
GÖKSU H., Arı N.  
Technical Report, pp.98, 1998

## Supported Projects

GÖKSU H., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Arge Altyapı Projesi, 2007 - 2008  
GÖKSU H., TUBITAK Project, Genel Kurmay Başkanlığı EMC Altyapı Projesi, 1997 - 1998

## Memberships / Tasks in Scientific Organizations

IEEE, Member, 2002 - 2008  
ENNS, Member, 2003 - 2004  
INNS, Member, 2002 - 2004

## Scientific Refereeing

IEEE Transactions on Electromagnetic Compatibility, SCI Journal, September 2020  
IEEE Transactions on Electromagnetic Compatibility, SCI Journal, August 2020  
Measurement, SCI Journal, June 2020  
IEEE Transactions on Electromagnetic Compatibility, SCI Journal, April 2020  
TUBITAK Project, April 2020  
November 2019  
Acta Physica Polonica B, Other Indexed Journal, February 2019  
TUBITAK Project, February 2019

Measurement and Control, SCI Journal, December 2018  
IEEE Sensors Journal, SCI Journal, October 2018  
Journal of Communications Software and Systems, Other Indexed Journal, October 2018  
Applied Soft Computing, SCI Journal, October 2018  
Measurement and Control, SCI Journal, July 2018  
Measurement and Control, SCI Journal, June 2018  
Measurement and Control, SCI Journal, March 2018  
Measurement and Control, SCI Journal, October 2017  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, February 2008  
ISIE 07, Other journals, December 2007  
IEEE Transactions on Neural Networks, SCI Journal, April 2006  
Lecture Notes in Computer Science, SCI Journal, June 2003

## Metrics

Publication: 30  
Citation (WoS): 112  
Citation (Scopus): 121  
H-Index (WoS): 6  
H-Index (Scopus): 7

## Scholarships

NATO Advanced Study Institute: Scottish Universities Summer Schools in Physics, Laser Plasma Interactions, NATO, 2005  
- Continues  
NATO Advanced Study Institute: Dynamics of Complex Interconnected Systems - Networks and Bioprocesses, NATO, 2005 - Continues  
NATO Advanced Study Institute: From Cells To Proteins - Imaging Nature Across Dimensions, NATO, 2004 - Continues  
NATO Advanced Research Workshop on Continuum Models and Discrete Systems, NATO, 2003 - Continues  
NATO Advanced Study Institute: Neural Networks for Instrumentation, Measurement and Related Industrial Applications, NATO, 2001 - Continues  
Full Tuition Scholarship, University, 1998 - Continues

## Awards

GÖKSU H., Liselerarası Fizik Yarışması Akdeniz Bölgesi İkincilik Ödülü, TÜBİTAK BAYG, January 1989