

Curriculum Vitae

Name: Serhat
Surname: Çakır
Birth of Place & Date: Tekirdağ, 7/6/1954

Education:

- BS in Physics (Department of Physics, Middle East Technical University/METU-1979)
- Ph.D. in Physics (Max-Planck Institute for Extraterrestrial Physics, Munich, Germany-Department of Physics, Middle East Technical University/METU-1987)

Scholarships:

- METU Undergraduate Scholarship (1975-1978)
- Max-Planck Institute Ph.D. Scholarship(1979-1983)

Foreign Languages:

German, English

Research Experiences:

- Plasma Physics Group at Max-Planck Institute for Extraterrestrial Physics, Munich, Germany-1979-
- Air Force Geophysical Research Institute, Boston, USA (1982)
- Plasma Physics Group, METU 1983-
- Butker Institute of Nuclear Physics, Novosibirsk, Russia (1995-)

Professional Positions:

- Student Assistantship Department of Physics, **METU** (1976-1978)
- Research Assistantship, Department of Physics, **METU** (1983-1988)
- Instructor Department of Physics, **METU** (1989-)
- Science Advisor, Scientific and Technical Research Council of Turkey (**TÜBİTAK**) (1991-1992)
- Head of Informatics Division of **TÜBİTAK** (1993- 1995)
- Advisor, Scientific and Technical Research Council of Turkey (**TÜBİTAK**) (2000-)
- National Coordinator **NATO AGARD** TI Panel (1992-1995)

Lectures given at METU:

Undergraduate

- Electromagnetic Theory I - II
- Computational Physics
- Plasma Physics
- Magnetohydro Dynamics
- Modern Physics
- Project in Physics
- Special Topic in Physics
- Optoelectronics I - II

Graduate

- Electromagnetic Theory-I (MS)
- Electromagnetic Theory-II (PhD)
- Applications of Electromagnetic Waves (Elective)

Supervised PhD Thesis:

1. Feza Büyükşahin (2000-)
2. Sema Salman (2000-)
3. Halil Berberoğlu (2001-)

Supervised M.S. Thesis:

1. Vatankhah Saeideh, (1991)
2. Gity Samadi Hosseinali, (1991)
3. Aliekber Akdağ, (1993)
4. S. Eren San, (1996)
5. Hilal Goktas, (1996)
6. Pınar Demir, (1997)
7. Semih Ersin, (1999)
8. Sema Salman (2000)
9. Feza Büyükşahin (2000)
10. Aynur Akyürek (2001)
11. Evren Aydın (2002)
12. Pınar Menten (2003)
13. Yaprak Balıbey (2003)
14. Burak Çamak (2003)
15. Başak Seçmen (2004)
16. Şerife Yaprak (2004)

Research Interest:

- Ionosphere Plasma Instabilities (Max-Planck Institute for Extraterrestrial Physics, Munich, Germany)

- Modeling of Plasma Systems (Max-Planck Institute for Extraterrestrial Physics, Munich, Germany)
- Communication in Ionosphere (Max-Planck Institute for Extraterrestrial Physics, Munich, Germany)
- Computer Modeling and Plasma Potential Calculations in Open System (Budker Institute for Nuclear Physics, Novosibirsk, Russia)
- Solution to Wave Equation in Waveguides (since 2 years)
- Coupling Theory in Optic Waveguides (since 2 years)

Projects:

1)

Magnetic Mirror Confinement and Neutron Source, with the Collaboration of Budker Institute of Nuclear Physics (BINP), Novosibirsk, **Russia** (supported by TÜBİTAK, DOPROG/501). (1995-1997)

The Participants:

METU	BINP
Assoc. Prof. Dr. S. Çakır (Project Director)	Prof. Dr. E.Kruglykov (BINP Coordinaator-Vise President of BINP)
Prof. Dr. S. Bilikmen	Prof. Dr. A. Ivanov
Prof. Dr. O. Demokan	Prof. Dr. I. Kotelnikov
Prof. Dr. G.Gündüz	Prof. Dr. I. Lansky
Prof. Dr. V.V. Mirnov	Prof. Dr. Yu. Tsidulko
Assoc. Prof. Dr. G. Öke	

2)

METU AFP Project (Project Director), 1996, Dedection of Electromagnetic Waves,

The Participants:

Prof. Dr. Sinan Bilikmen
 Prof. Dr. Ordal Demokan
 Assoc. Prof. Dr. Gülay Öke

3)

METU AFP Project (Project Director), 1997, Dedection of Electromagnetic Waves II,

The Participants:

Prof. Dr. Sinan Bilikmen

Prof. Dr. Ordal Demokan
Assoc. Prof. Dr. Gülay Ök

4)

INTERNET Project 1991-1995

TÜBİTAK

5)

National Scientific and Technical Information Database (as Supervisor)

BITAV (Science and Technology Foundation), 1997

6)

METU Natural Sciences Institute Project 2002-2004

Çakır, S., Salman S., Asymptotic Solution to the Wave Equation in Cylindrical Waveguides

Project No: 02-07-02-00-020

7)

METU Natural Sciences Institute Project 2002-2004

Çakır, S., Büyükşahin F., WDM Simulation and BER Calculations in Fiberoptic Cables

Project No: 02-07-02-00-019

International Symposium :

The Tenth International Symposium on Equatorial Aeronomy

May 17 – 23, 2000 Antalya TURKEY

(Local Organizer)

Books:

- Calculus by Thomas, T., (Translation) Arkadaş Kitapevi 1990
- Informatics in Turkey (part of OECD National Report 1992)
- Outlook (Microsoft Press), (Translation) Arkadaş Kitapevi 1998

Memberships:

- NATO AGARD TIP National Coordinator (1992-1995)
- TÜVEKA (Türkiye Üniversiteler ve Araştırma Kurumu Ağı) (1993-1995)
- UBAM (Ulusal Bilgisayar Ağları Merkezi) , 1995
- ODTÜ Öğretim Üyeleri Derneği
- TBD (Türk Bilişim Derneği)
- ISOC (Internet Society)

Number of Citations (not by S. Çakır) > 50

Publication List

- 1) Rafatov IR, Cakir S, Modelling of a nonequilibrium spherical electric discharge under higher modes of incident microwaves, PHYSICS LETTERS A 338 (3-5): 353-365 MAY 2 2005
- 2) Cakir S, San SE, Mirnov VV, Oke G, MHD stability in axisymmetric multiple mirror geometry, FUSION TECHNOLOGY , 35 (1T): 215-217 JAN 1999
- 3) Tsidulko YA, Marji E, Bilikmen S, Mirnov VV, Cakir S, Oke G, Axial shear instability in a "tachion" region, FUSION TECHNOLOGY, 35 (1T): 304-307 JAN 1999
- 4) Ivanov, A.A., Kruglyakov, E.P. Tsildulko, A., Volosov, V.I., Adryash, A.V., Lukin, A.V., Grebenkin, V.G., Kumpf, H., Noak, K., Robouch, V.V., Cakır, S., Bilikmen, S., Mirnov, V. V., Improved Version of a Mirror Based 14MeV Neutron Source,
- 5) Mirnov, V., Bilikmen, S., Çakır S., Ballooning Modes in Open Magnetic Traps, XVI. IAEA Fusion Energy Conference, Montreal Canada, 7-11 October 1997
- 6) Mirnov, V. V., Bilikmen, S., Çakır, S., New Results of on Balloning Modes in Open Traps, Paper 7E.10, to be published in the Bull. Am. Phys. Soc. Of 38th Annual Meeting of the DPP of APS, Denver, 1996
- 7) Çakır, S., Haerendel, G., and Eccles, J.V., Modeling the Ionospheric Responce to Artificially Produced Density Enhancements, *J. Geophys. Res.* 97, A2, 1193 -1207, 1992
- 8) Haerendel, G., and Eccles, J.V.,Çakır, S., Theory for Modeling the Equatorial Evening Ionosphere and the Origin of the Shear in the Horizontal Plasma Flow, *J Geophys. Res.* 97, A2, 1209 -1223, 1992
- 9) Çakır, S., Haerendel, G., Numerical Simulation of Colored Bubbles, Proceedings of the 3-5 March 1984 BIME/CB Preliminary Data Review, *AFGL, Hascom AFB, MA 01731*, 1984
- 10) Ögelman, H., Böhringer, H., Buchert, S., Çakır, S., LaBelle, J., and Treumann, R.A., Could There be Terrestrial Signatures of the EUV Pulse from Supernova 1987A, *Astron Astrophys.* 183, 27,1987
- 11) Haerendel, G., Bauer O.H., Çakır, S., Föppe, H., Rieger. E., and Valenzuela, A., Colored Bubbles: An Experiment for Triggering Equatorial Spread-F, in Active Experiments in Space, *ESA, SP-195*, p.295.1983
- 12) Çakır, S., Haerendel, G., Nümerische Modelle zur Dynamik der Aequatorialen lososphaere, *Deutsche Physikalische Gesellschaft Tagung*, 14, 176, 1983
- 13) Haerendel, G., Valenzuela, A., Föppe, H., Çakır, S., und Bauer, O., Ein Experiment zur Auslösung von Aequatorialem Spread-F, *Deutsche Physikalische Gesellschaft Tagung*, 14, 177, 1983