

## CURRICULUM VITAE AND PUBLICATIONS LIST

### CURRICULUM VITAE

**Name:** Hasan SAYGIN

**Date of Birth:** 31 December 1960

**Degree:** Ph. D.

**Title:** Prof. Dr.

Degree	Department	University	Year
Undergraduate	Mathematical Engineering.	Yildiz Technical University	1982
Graduate	Nuclear Engineering	Istanbul Technical University	1985
PhD	Nuclear Engineering	Universite de Montreal, Ecole Polytechnique de Montreal, Institute de Genie Energetique	1994

**Graduate Thesis Title and Supervisor:** " Comparison of Linear System Solution Methods in Calculation of 2-Dimensional Diffusion "

**Supervisor:** Prof. Dr. Atilla Özgener

**PhD Thesis Title and Supervisor:** " Étude du ralentissement des neutrons et de l'autoprotection des résonances dans les réacteurs nucléaires "

**Supervisor:** Prof. Dr. Alain Hébert

### Professional Experience:

Title	Place of Duty	Year
Prof. Dr.	ISTANBUL AYDIN UNIVERSITY, Faculty of Engineering & Architecture, Mechanical Engineering Department	2009- Cont.
Prof. Dr.	TURKISH GENERAL STAFF War Colleges Command, Strategic Research Institute	2008-2009
Prof. Dr.	ISTANBUL TECHNICAL UNIVERSITY, Energy Institute, Nuclear Researches Department	2003-2009
Prof. Dr.	ISTANBUL TECHNICAL UNIVERSITY, Nuclear Energy Institute, Nuclear Researches Department	2002-2003
Assoc. Prof. Dr.	ISTANBUL TECHNICAL UNIVERSITY, Nuclear Energy Institute, Nuclear Sciences Department	1996-2002
Assis. Prof. Dr.	ISTANBUL TECHNICAL UNIVERSITY, Nuclear Energy Institute, Nuclear Sciences Department	1994-2002
Research Assistant	UNIVERSITÉ DE MONTRÉAL, ÉCOLE POLYTECHNIQUE DE MONTRÉAL, Institut de génie énergétique	1989-1994
Research Assistant	ISTANBUL TECHNICAL UNIVERSITY, Nuclear Energy Institute, Nuclear Sciences Department	1987-1989
Research Assistant	YILDIZ TECHNICAL UNIVERSITY, Faculty of Science and Letters, Department of Physics, Atomic and Molecular Physics Division	1984-1987

**Main Experience:**

<b>2009 - Cont</b>	Dean of Faculty of Engineering and Architecture, İstanbul Aydın University
<b>2009 - Cont</b>	Head of Department of Electric-Electronic Engineering, Faculty of Engineering and Architecture, İstanbul Aydın University
<b>2003 - 2007</b>	Member of Turkish Atomic Energy Regulatory Board (TAEK)
<b>2003 - 2007</b>	Member of Turkish Atomic Energy Commission Advisory Board
<b>2003 - 2005</b>	Director of Energy Institute, İstanbul Technical University
<b>2002 - 2003</b>	Director of Nuclear Energy Institute, İstanbul Technical University
<b>1994 - 1999</b>	Co-Director of Nuclear Energy Institute, İstanbul Technical University

**Given Lectures in the last two year:**

**TURKISH GENERAL STAFF**  
**WAR COLLEGES COMMAND**  
**STRATEGIC RESEARCH INSTITUTE;**

**International Relation Graduate Program:**

2007 - still                    **International Energy Policies and Security**, 3+0, Turkish, Compulsory, winter term.

**National and International Security Strategies Graduate Program:**

2007 - still                    **Geopolitics of Energy and Analysis of International Energy Policies**, 3+0, Turkish, Compulsory, spring term.

**ISTANBUL TECHNICAL UNIVERSITY,**  
**ENERGY INSTITUTE;**

**Energy Science and Technologies Graduate Program:**

2004 - 2009                    **EBT608E Neutron Transport Theory**, 3+0, English, Compulsory, spring term.

2003 - 2009                    **EBT511E Reactor Theory**, 3+0, English, Compulsory, winter term.

2003 - 2009                    **EBT513 Numerical Methods in Nuclear Engineering**, 3+0, Turkish, Compulsory, winter term.

**Nuclear Energy Graduate Program:**

2003 - 2009                    **NEZ501 Reactor Theory I**, 2+0, Turkish, Compulsory, winter term.

2003 - 2009                    **NEZ506 Reactor Experiments**, 0+4, Turkish, Compulsory, spring term.

**PUBLICATIONS LIST****A. Articles published in international scientific journals:**

- J. MAKINO, P. HUT, M. KAPLAN and **H. SAYGIN**, " *A time-symmetric block time-step algorithm for N-body simulations* ", **New Astronomy**, Vol. **12**, No. 2, pp. 124-133 (2006).
- H. KAYA, M. KAPLAN and **H. SAYGIN**, " *A Recursive Algorithm for Finding HDMR Terms for Sensitivity Analysis* ", **Computer Physics Communications**, Vol. **158**, No.2, pp. 106-112 (2004).
- **H. SAYGIN** and A. ŞİŞMAN, " *Quantum degeneracy effect on the work output from a Stirling cycle* ", **Journal of Applied Physics**, Vol. **90**, No. 6, pp. 3086-3089 (2001).
- **H. SAYGIN** and A. ŞİŞMAN, " *Joule-Thomson Coefficients Of Quantum Ideal Gases* ", **Applied Energy**, Vol. **70**, No. 1, pp. 49-57 (2001).
- ŞİŞMAN, and **H. SAYGIN**, " *Re-Optimisation of Otto Power Cycles Working With Ideal Quantum Gases* ", **Physica Scripta**, Vol. **64**, No. 2, pp. 108-112 (2001).
- **H. SAYGIN** and A. ŞİŞMAN, " *Brayton Refrigeration Cycles Working under Quantum Degeneracy Conditions* ", **Applied Energy**, Vol. **69**, No. 2, pp. 77-85 (2001).
- ŞİŞMAN and **H. SAYGIN**, " *Efficiency Analyses of a Stirling Power Cycle under Quantum Degeneracy Conditions* ", **Physica Scripta**, Vol. **63**, No. 4, pp. 263-267 (2001).
- ŞİŞMAN and **H. SAYGIN**, " *The Improvement Effect of Quantum Degeneracy on the Work from Carnot Cycle* ", **Applied Energy**, Vol. **68**, No. 4, pp. 367-376 (2001).
- ŞİŞMAN and **H. SAYGIN**, " *On The Power Cycles Working With The Ideal Quantum Gases: I The Ericson Cycle* ", **Journal of Physics D: Applied Physics**, Vol. **32**, No. 6, pp. 664-670 (1999).
- **H. SAYGIN**, " *Le développement d'une nouvelle procédure d'autoprotection dans le cadre de la méthode des taux de réaction effectifs* ", **Canadian Journal of Physics**, Vol. **76**, pp. 47-62 (1998).
- **H. SAYGIN**, A. ŞİŞMAN and T. BÜKE, " *A Comparison Between the Results of Perturbation Theory and Trigap for the Reactivity Worth Calculations of Fuel Elements* ", **Annals of Nuclear Energy**, Vol. **25**, No. 14, pp. 1133-1140 (1998).
- **H. SAYGIN** and A. HÉBERT, " *A New Self-Shielding Method Based on Detailed Cross-Section Representation in the Resolved Energy Domain* ", **Nuclear Science and Engineering**, Vol. **122**, pp. 276-282 (1996).
- S. HACIYAKUPOĞLU, T. A. ERTEK, G. KARAHAN, F. ÖZTÜRK, A. E. ERGİNAL, N. ÇELEBİ, **H. SAYGIN**. " *Research on erosion using Cs-137 measurements in the Riva creek basin and Buyukcekmece lake basin* ", **Agricultural Engineering Scientific Magazine of Institute for Land Reclamation and Agricultural Mechanization and Centre for Scientific Technical Information**, Issue: 5-6: pp. 32-35 (2003).
- **H. SAYGIN** and E. OĞUZHAN, " *Capacity of DRAGON2 Neutron Transport Code in Neutronic Calculations for Pincell and Assemblies of ALMARAZ2 Reactor* ", **Balkan Physics Letters**, Special Issue, pp. 292-312 (2001).

- E. OĞUZHAN and **H. SAYGIN**, " *Burn-up and Global Core Analyses of ALMARAZ2 Reactor With the Help of DRAGON2-CITATION Code Package* ", **Balkan Physics Letters**, Special Issue, pp. 261-275 (2001).
- **H. SAYGIN** and M. YALÇINKAYA, " *Counting of Solitons of the MKdV Equation Under the Sech Type Initial Potential* ", **Balkan Physics Letters**, Vol. 6, No. 1, pp. 46-48 (1998).
- HÉBERT and **H. SAYGIN**, " *A New Module for the Formatting of DRAGON Cross-section Libraries* ", **Turkish Journal of Nuclear Sciences**, Vol. 24, No. 2, pp. 77-92 (1997).
- **H. SAYGIN**, " *Neutronic Analysis of a CANDU Cell in the Case of Coolant Loss* ", **Turkish Journal of Nuclear Sciences**, Vol. 24, No. 2, pp. 105-114 (1997).
- M. YALÇINKAYA and **H. SAYGIN**, " *Soliton for Modified Korteweg-De-Vries Equation* ", **Balkan Physics Letters**, Vol. 5, No. 2, pp. 69-76 (1997).

#### **B. Papers submitted in international meetings/congresses:**

- **H. SAYGIN**, " *Global Trends for the Role of Renewable Energy in Sustainable Energy Policies and Turkey's Vision* ", Renewable Energy Networks between Turkish and European Universities (RENET), INTERNATIONAL RENEWABLE ENERGY CONFERENCE (IREC), Garanti Kültür Merkezi, Uçaksavar Campus, Bogazici University 19-20 November (2009), Istanbul-Turkey.
- **H. SAYGIN**, " *Education and Art in Today's Changing Paradigm* ", 1<sup>st</sup> Art&Science Festival in University of Patras, 1<sup>st</sup> International Semposium of Pedagogic, 02-10 September (2009), Patras-Greece
- M. KAPLAN and **H. SAYGIN**, " *Hermite Integrations with TSBTS Algorithm for N-Body Problems* ", WSEAS Conferences in Istanbul, Turkey; Joint Conference Program: MAASE: Multivariate Analysis in Engineering 27-30 May (2008), Istanbul-Turkey.
- M. S. KIZILTAŞ, S. HACIYAKUPOĞLU, T. A. ERTEK, D. E. WALLING, A. E. ERGİNAL, F. GOKBULAK, D. TOLUNAY, G. KARAHAN, **H. SAYGIN**, A. HIZAL., " *Soil Erosion From Different Landuse Types In The Omerli Watershed Using Fallout Radionuclides Methodology* ", International Conference Erosion & RBM 2007, Faculty of Forestry, University of Belgrade, Belgrade/Predejane, **Serbia and Montenegro S&M**.
- S. HACIYAKUPOGLU, T. A. ERTEK, D. E. WALLING, A. E. ERGİNAL, G. KARAHAN, F. GOKBULAK, D. TOLUNAY, **H. SAYGIN**, A. HIZAL, M. KAYA, M. S. KIZILTAS, " *Use of Fallout Radionuclides Measurements for Sustainable Watershed Management in Eastern and Western Sites Of Istanbul* ", Proceedings of International Conference Forest Impact on Hydrological Processes and Soil Erosion, University of Forestry, P.130-136, October 5-8, 2005, Yundola, **Bulgaria**.
- S. ONAYGİL, Ö. GÜLER, E. ERKİN and **H. SAYGIN**, " *A Case Study in Istanbul: Energy Saving By Using Compact Fluorescent Lamps at the Residences* ", Lux Europa 2005, 10<sup>th</sup> European Lighting Congress (Léon 2005) 19-21 September (2005), Berlin, **Germany**.
- ERDÖNMEZ and **H. SAYGIN**, " *Conduction Heat Transfer Problem Solution Using the Method of Fundamental Solutions With the Dual Reciprocity Method*", 2005 ASME Summer Heat Transfer Conference, July 17-22 (2005), San Francisco, California, **USA**.
- ERDÖNMEZ, M. TEZER-SEZGİN and **H. SAYGIN**, " *The Method of Fundamental Solutions of the Magneto-hydrodynamic* ", ECCOMAS Thematic Conference on Meshless Methods, MESHLESS 2005, July 11-14 (2005), Lisbon-**Portugal**.

- S. ONAYGİL, Ö. GÜLER, E. ERKİN and **H. SAYGIN**, " *Energy Efficient Lighting by Compact Fluorescent Lamps (CLSs) at the Residences* ", CIE Midterm Meeting and International Lighting Congress (Léon 2005) 12-21 May (2005), Léon-**Spain**.
- ERDÖNMEZ and **H. SAYGIN**, " *Neutron Diffusion Problem Solutions Using The Method of Fundamental Solutions With Dual Reciprocity Method* ", International Conference Of Computational Methods In Sciences And Engineering 2004 (ICCMSE 2004) 19-23 November (2004), Athena-**Greece**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, D.E. WALLING, G. KARAHAN, A. E. ERGİNAL, F. GOKBULAK, D. TOLUNAY, **H. SAYGIN**, M. S. KIZILTAS, N. CELEBI, L. GURELI, A. HIZAL, B. ATAKSOR, S.AKBAL, Progress Report for " *The Use of Cs-137, Pb-210 and Be-7 Measurements for Assessing Soil Erosion and Sedimentation in the Riva Basin (Istanbul, NW Turkey)* " of the 2th RCM of Co-ordinated Research Project "Assessing The Effectiveness Of Soil Conservation Techniques For Sustainable Watershed Management Using Fallout Radionuclides", November 2004, Istanbul, **Turkey**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, DES E. WALLING, G. KARAHAN, A. E. ERGİNAL, **H. SAYGIN**, İ. OĞUZ, " *Using Cs-137 Measurements to Estimate Soil Erosion on a Cultivated Land in Istanbul* ", International Symposium on Earth System, 10 September (2004), İstanbul, **Turkey**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, İ. OĞUZ, A. E. ERGİNAL, A. HIZAL, F. GÖKBULAK, **H. SAYGIN**, Community Based Rehabilitation Case Studies: Celikli And Yoguntas Villages In Turkey. Proceedings International/National Workshop " *Community Based Rehabilitation Of Degraded Lands Of Central Balkan Mountains And Northern Turkey* ", P. 87-93, Editors M. ZLATIC, S. KOSTADINOV, N. DRAGOVIC, Faculty of Forestry, ISBN 86-7299-111-7, 8-10 July 2004, Belgrade, **Serbia and Montenegro (S&M)**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, İ. OĞUZ, A. E. ERGİNAL, A. HIZAL, F. GÖKBULAK, **H. SAYGIN**, " *Research On Erosion Using Fallout Radionuclide Methodology and Community Based Rehabilitation in Turkey* ", Regional Workshop, 8-10 July (2004), Belgrade/Predejane, **Serbia and Montenegro S&M**.
- S. ONAYGİL, Ö. GÜLER, E. ERKİN and **H. SAYGIN**, " *Energy Saving by Using Compact Fluorescent Lamps at the Residences* ", XII National Conference on Lighting, Ligth'2004, 15-17 June (2004), Bulgarian National Committee on Illumination, Varna - **Bulgaria**.
- S. HACIYAKUĞOĞLU, T. A. ERTEK, G. KARAHAN, Z: F. ÖZTÜRK, A. E. ERGİNAL, N. ÇELEBİ and **H. SAYGIN**, " *Research on Erosion Using Cs-137 Measurements in the Riva Creek Basin and Buyukçekmece Lake Basin (Istanbul / NW Turkey)* ", International Scientific Conference on Agricultural Water Management and Mechanization – Factors for Sustainable Agriculture, 8- 10 October (2003), National Centre for Agrarian Sciences Research Institute for Land Reclamation and Agricultural Mechanization (RILRAM), Sofia- **Bulgaria**.
- S. HACIYAKUĞOĞLU, T. A. ERTEK, G. KARAHAN, Z: F. ÖZTÜRK, A. E. ERGİNAL, N. ÇELEBİ and **H. SAYGIN**, **WASWC Balkan meeting** (2003) *Report on "research on Erosion in Buyukcekmece Lake Basin; One of the Main Drinking Water Sources in Istanbul"*, Sofia, **Bulgaria**.
- H. KAYA and **H. SAYGIN**, " *Using Multifrontal Methods for Solution of Neutron Diffusion Equation* ", IUTAM (International Union of Theoretical and Applied Mechanics) International Conference on Supercomputing in Nuclear Applications SNA'2003 Palais des Congrès, 22-24 September (2003), Paris-**France**.
- H. KAYA, M. KAPLAN and **H. SAYGIN**, " *A Recursive Algorithm for Finding HDMR Terms for Sensitivity Analysis* ", International Conference Of Computational Methods In Sciences And Engineering 2003 (ICCMSE 2003) 12-16 September (2003), Kastoria-**Greece**.

- S. ÜSKÜPLÜ, **H. SAYGIN** and S. ERGİNTAV, " *Three Dimensional Simulation of Elastic Wave Propagation in the Izmit Bay* ", The IASTED International Conference on Applied Simulation And Modelling ~ASM 2003~ September 3 - 5, (2003), Marbella-**Spain**.
- G. TAŞKIN, S. ÜSKÜPLÜ, **H. SAYGIN** and S. ERGİNTAV, " *Optimization of GPS Observation Strategy for Improvement of Tectonic Measurements* ", The IASTED International Conference on Applied Simulation And Modelling ~ASM 2003~ September 3 - 5, (2003), Marbella-**Spain**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, Z. F. ÖZTÜRK, G. KARAHAN, A. E. ERGİNAL, N. ÇELEBİ, H. KAYA, **H. SAYGIN**, " *Research On Erosion In Buyukcekmece Lake Basin; One Of The Main Drinking Water Sources In Istanbul* ", WASWC Balkan Meeting 2003, 1-2 July (2003), Sofia-**Bulgaria**.
- S. GÖKALTUN, **H. SAYGIN** and M. MURATOĞLU, " *Implicit Multigrid Computations of Unsteady Multiphase Flows in Varying Cross-Sectional Area Channels* ", IUTAM (International Union of Theoretical and Applied Mechanics) Symposium On Integrated Modeling of Fully Coupled Fluid-Structure Interactions Using Analysis, Computations, and Experiments, Sponsored by: Rutgers, The State University & the office of Naval Research, 1 June-6 June (2003), Rutgers, New Jersey-**USA**.
- G. TAŞKIN, **H. SAYGIN** and M. DEMİRALP, " *Approximation Scheme For Multivariate Hypersurface fitting Problems* ", International Symposium on GIS (Geographic Information Systems), including Annual Meeting of FIG (International Federation of Surveyors) COM 3 ( Spatial Information Management), September 23-26 (2002), Istanbul-**Turkey**.
- G. TAŞKIN, **H. SAYGIN**, M. DEMİRALP and M. YANALAK, " *Least Squares Curve Fittingn Via High Dimensional Model Representation For Digital Elevation Model* ", International Symposium on GIS (Geographic Information Systems), including Annual Meeting of FIG (International Federation of Surveyors) COM 3 (Spatial Information Management), September 23-26 (2002), Istanbul-**Turkey**.
- **H. SAYGIN** and E. OĞUZHAN, " *Capacity Of Dragon2 Neutron Transport Code In Neutronic Calculations For Pincell And Assemblies Of Almaraz2 Reactor* ", First Hellenic-Turkish International Physics Conference, September 10-15 (2001), Bodrum-**Turkey** and Kos-**Greece**.
- OĞUZHAN and **H. SAYGIN**, " *Burn-Up And Global Core Analyses Of Almaraz2 Reactor With The Help Of Dragon2-Citation Code Package* ", First Hellenic-Turkish International Physics Conference, September 10-15 (2001), Bodrum-**Turkey** and Kos-**Greece**.
- **H. SAYGIN** and A. ŞİŞMAN, " *An Overview of Thermodynamic Gas Cycles Working at Quantum Degeneracy Conditions*", 2<sup>nd</sup> International Heat Powered Cycles Conference, HPC'01 Cooling, Heating and Power Generation Systems, September 5-7 (2001), Conservatoire National des Arts et Métiers, Paris, **France**.
- ŞİŞMAN, and **H. SAYGIN**, " *Thermodynamic Analyses of Heat Engines Based on the Casimir Effect at Finite Temperature* ", 2<sup>nd</sup> International Heat Powered Cycles Conference, HPC'01 Cooling, Heating and Power Generation Systems, September 5-7 (2001), Conservatoire National des Arts et Métiers, Paris, **France**.
- ŞİŞMAN, **H. SAYGIN** and A. ÖZTÜRK, " *Thermodynamic Analysis of the Ericsson Refrigeration Cycles Working with Quantum Ideal Gases* ", Efficiency, Cost, Simulations and Environmental Impact of Energy Systems AND First International Conference on Applied Thermodynamics, ECOS'01 July 4-6 (2001), Istanbul Technical University, Mechanical Engineering Department, Istanbul, **Turkey**.
- N. ONDER, A. TEYSSEDOU and **H. SAYGIN**, " *Void Fractions in Vertical-to-Horizontal Counter-Current Two-Phase Flows* ", 18<sup>th</sup> Canadian Congress of Applied Mechanics, CANCAM 2001, June 3-7 (2001), Memorial University of Newfoundland, Faculty of Engineering and Applied Science, Newfoundland, **Canada**.

- M. KAPLAN and **H. SAYGIN**, " *Multifrontal Method for 2D Neutron Diffusion Calculations* ", Conference on Mathematical Modelling and Scientific Computing, April 2-6 (2001), Middle East Technical University (METU) in Ankara and Selçuk University in Konya, **Turkey**.
- M. Y. PEKER and **H. SAYGIN**, " *A Neutron Diffusion Equation Solver Using Object Oriented Technique* ", Conference on Mathematical Modelling and Scientific Computing, April 2-6 (2001), Middle East Technical University (METU) in Ankara and Selçuk University in Konya, **Turkey**.
- M. Y. PEKER and **H. SAYGIN**, " *A Visual Nuclear Fuel Management Driver* ", Conference on Mathematical Modelling and Scientific Computing, April 2-6 (2001), Middle East Technical University (METU) in Ankara and Selçuk University in Konya, **Turkey**.
- **H. SAYGIN**, (**Invited Talk**), " *Quantum Degeneracy, Classical and Finite-Time Thermodynamics: I Basic Concepts and Some Applications on Efficiency Analyses* ", Advances in Finite-Time Thermodynamics, November 12-14 (2000), Jerusalem, **Israel**.
- TEYSSEDOU, N. ONDER, **H. SAYGIN** and H. HUYNG, " *Characterization of the Slug Formation in Counter-Current Two-Phase Flows* ", Communicating the Nuclear Advantage, 39<sup>th</sup> Annual Canadian Nuclear Association Conference & 20<sup>th</sup> Annular Canadian Nuclear Society Conference, 30 May – 3 June (1999), Montréal, Québec, **Canada**.
- N. ONDER, A. TEYSSEDOU, **H. SAYGIN** and H. HUYNG, " *Characterization of the Slug Formation in Counter-Current Two-Phase Flows* ", 17<sup>th</sup> Canadian Congress of Applied Mechanics, CANCAM 99, 30 May – 3 June (1999), McMaster University, Hamilton, Ontario, **Canada**.
- **H. SAYGIN**, T. BÜKE and A. ŞİŞMAN, " *Reactivity Calculations for the Fuel Elements of ITU TRIGA MARK-II Reactor by Means of One-Group Perturbation Theory* ", 14<sup>th</sup> European TRIGA Conference, September 22-25 (1996), Mainz, **Germany**.
- **H. SAYGIN** and A. HÉBERT, " *A New Self-Shielding Method Based on Detailed Cross-Section Representation in the Resolved Energy Domain* ", paper presented at the American Nuclear Society 1994 Topical Meeting on Advances in Reactor Physics, Reactor Physics Faces the 21st Century, April 11-15 (1994), Knoxville, Tennessee, **USA**.
- HÉBERT and **H. SAYGIN**, " *Development of DRAGR for the Formatting of DRAGON Cross-Section Libraries* ", paper presented at the Seminar on NJOY-91 and THEMIS for the Processing of Evaluated Nuclear Data Files, NEA Data Bank, April 7-8 (1992), Saclay, **France**, sponsored by OECD.

### C. Papers submitted in national meetings/congresses:

- **H. SAYGIN**, " *Avrupa Birliği'nin Enerji Politikaları ve Türkiye'nin Sürece Uyumu* ", Sürdürülebilir Yaşam İçin Enerjide Büyük İnovasyon & "Enerjide Yükselen Yeni Bölgesel Güç: Türkiye" temalı Türkiye Enerji Forumu 2008'de "Sürdürülebilirlik; Enerjide AB'ye Uyum Süreci ve Enerji Topluluğu" temalı 6. Oturum, 01-02-03 temmuz 2008, Adile Sultan Sarayı, İstanbul-**Türkiye**.
- T. YARMAN (Oturum Başkanı), **H. SAYGIN**, A. CLERICI, Ç. GÖLTAŞ ve O. YEŞİN " *Nükleer Enerji* ", (Panel), Dünya Enerji Konseyi Türk Milli Komitesi, Türkiye 10. Enerji Kongresi, Dünya'da ve Türkiye'de Enerji-Uygulamalar ve Sorunlar, Askeri Müze ve Kültür Sarayı, 27-30 Kasım 2006, Harbiye, İstanbul-**Türkiye**
- O. ÖZ ve **H. SAYGIN**, " *Sanayide Enerji Yönetimine Yeni Bir Yaklaşım* ", (Poster), Dünya Enerji Konseyi Türk Milli Komitesi, Türkiye 10. Enerji Kongresi, Dünya'da ve Türkiye'de Enerji-Uygulamalar ve Sorunlar, Askeri Müze ve Kültür Sarayı, 27-30 Kasım 2006, Harbiye, İstanbul-**Türkiye**.

- O. ÖZ ve H. SAYGIN, " *Algoritmik Yaklaşım Doğrultusunda Tekstil Sanayisinde Enerji Yönetimi Uygulamaları* ", (Poster), Dünya Enerji Konseyi Türk Milli Komitesi, Türkiye 10. Enerji Kongresi, Dünya'da ve Türkiye'de Enerji-Uygulamalar ve Sorunlar, Askeri Müze ve Kültür Sarayı, 27-30 Kasım 2006, Harbiye, İstanbul-**Türkiye**.
- H. SAYGIN, " *Sürdürülebilir Enerji Politikalarında Nükleer Enerji'nin Yeri ve Türkiye* ", Türkiye Tekstil Sanayi İşverenleri Sendikası, Konferans, 31 Ağustos 2006, İstanbul-**Türkiye**.
- H. SAYGIN, " *Türkiye'nin Enerji Seçenekleri: Yenilenebilir Enerjiler ve Nükleer Santraller?* ", Makine Mühendisleri Odası (MMO) Mersin Şubesi Paneli, 24 Haziran 2006, Mersin Ticaret ve Sanayi Odası (MTSO) Konferans salonu, Mersin-**Türkiye**.
- H. SAYGIN, " *Türkiye'nin Enerji Politikaları Ne Olmalı?* ", Türkiye'nin Enerji Stratejisi Paneli, 12 Nisan 2006, İstanbul Ticaret Üniversitesi, İstanbul-**Türkiye**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, D. E. WALLING, G. KARAHAN, A. E. ERGİNAL, F. GÖKBULAK, D. TOLUNAY, N. ÇELEBİ, H. SAYGIN, A. HIZAL, M. KAYA, " *<sup>137</sup>Cs, <sup>210</sup>Pb ve <sup>7</sup>Be Serpinti Radyonüklidlerinin Riva Havzasındaki Dağılımlarının İncelenmesi* ", IX.Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Bildiri özetleri kitabı 229, Tam metin bildiriler CD, 14-16 Eylül 2005, Ege Üniversitesi, İzmir-**Türkiye**.
- S. ONAYGİL, Ö. GÜLER, E. ERKİN, H. SAYGIN, " *Konutlarda Kompakt Flüoresan Lamba (KFL) Kullanımı* ", 5. Ulusal Aydınlatma Kongresi ve Interlight İstanbul Fuarı, 7 – 8 Ekim (2004), CNR Fuar Merkezi, İstanbul-**Türkiye**.
- S. HACIYAKUPOĞLU, T. A. ERTEK, G. KARAHAN, A. E. ERGİNAL, Z. F. ÖZTÜRK, N. ÇELEBİ, H. SAYGIN, " *Usage of Sezyum-137 Measurements in Water Basins on East and West Sides of Istanbul Bosphorus* ", V. Conference On The Areas Of Sea And Shore Of Turkey: The Shores Of Turkey 04, 4 – 7 May (2004), Cukurova University, Adana-**Turkey**.
- S. HACIYAKUPOĞLU, T.A. ERTEK, N. ÇELEBİ, G. KARAHAN, Z.F. ÖZTÜRK, A.E. ERGİNAL, H. KAYA, H. SAYGIN, " *Erosion Research by Cs-137 Measurements in the Land of Büyükçekmece Lake Basil and Riva Stream Basil* " VIII National Nuclear Sciences and Technologies Kongress 15-17 October (2003), Erciyes University, Kayseri-**Turkey**.
- H. SAYGIN, M. KAPLAN and M. DEMİRALP, " *Factorised High Dimensional Representation Model in the Solution Iteration of Schrodinger's Evolution Equation with Time-independent Hamiltonian*", XII National Mechatronics Congress 10 – 14 September (2001), Selcuk University, Konya- **Turkey**.
- H. SAYGIN, H. KAYA and M. DEMİRALP, " *Factorised High Dimensional Representation Model in the Solution Iteration of Schrodinger's Evolution Equation with Time-dependent Hamiltonian* ", XII National Mechatronics Congress 10 – 14 September (2001), Selcuk University, Konya- **Turkey**.
- M. YALÇINKAYA and H. SAYGIN, " *Soliton for Modified Korteweg-De-Vries Equation* ", I. National Meeting of Numerical Methods in Natural and Applied Sciences, 31 May - 2 June (1996), Istanbul Technical University, İstanbul-**Turkey**.

#### D.Articles published in national scientific journals:

- H SAYGIN, T. KÜPELİ, A. KÜÇÜKŞAHİN ve A. DEMİR, " *Nükleer Enerji ve Ulusal Güvenlik* ", **Silahlı Kuvvetler Dergisi**, Yıl: 126, Sayı: 391, Sayfa: 22-35, Ocak (2007).
- H SAYGIN, T. KÜPELİ, A. KÜÇÜKŞAHİN ve A. DEMİR, " *Güvenlik Boyutunda Nükleer Enerjinin Sorunları ve Türkiye* ", **Güvenlik Stratejileri Dergisi**, Yıl: 2, Sayı: 3, Sayfa: 7-20, Haziran (2006).

- T. A. ERTEK, S. HACIYAKUPOĞLU, Des E. WALLING, G. KARAHAN, A. E. ERGİNAL, N. ÇELEBİ, **H. SAYGIN** " *Sezyum-137 Radyonüklidinin Erozyon Araştırmalarında Kullanımı ve Türkiye'den Örnekler* ", İstanbul Üniversitesi Edebiyat Fakültesi Coğrafya Bölümü **Coğrafya Dergisi**, Sayı: 12, Sayfa: 47-62, (2004).
- **H. SAYGIN**, " *Sürdürülebilir Gelişme ve Nükleer Enerji* ", **Enerji, Monthly review of the sector**, Year: 9, Issue: 9, pp. 58-63 September (2004).

#### **E. Papers submitted in national meetings**

- **H. SAYGIN**, " *Role of Nuclear Energy and Renewable Energy Sources in Turkish Energy Politics* ", ITU M.Sc. Engineers Union, 18 October (2003), Ankara, **Turkey**.
- **H. SAYGIN**, " *Conjectural Energy Balances and an Energy Strategy for Turkey* " SAREM, 8 September (2003), Ankara, **Turkey**.
- **H. SAYGIN**, " *Present Difficulties and Future of Energy Investments in Turkey* ", Opening Speech, ITU Energy Institute, Energy Days I, 30 April (2003), ITU, Süleyman Demirel Culture Center, Istanbul, **Turkey**.
- **H. SAYGIN**, " *ITU and TIME Cooperation* ", International Education & Research Programs at ITU session, ITU International Week, April 21 - 23 (2003), ITU, Süleyman Demirel Culture Center, Istanbul, **Turkey**.

#### **F. Other Presentations :**

- **H. SAYGIN**, " *Introduction of Istanbul Technical University and Energy Institute and Possible Future Cooperation Areas* ", Ovidius University of Constantza, March 10 (2004), Constantza, **Romania**.
- **H. SAYGIN**, " *Introduction of Istanbul Technical University and Energy Institute and Possible Future Cooperation Areas* ", Technical University of Construction of Bucharest, Faculty of Installation (TUCB), March 8 (2004), Bucharest, **Romania**.
- **H. SAYGIN**, " *Targeted Role of the Istanbul Technical University –Energy Institute in Soil and Water Conservation* ", WASWC (World Association of Soil and Water Conservation) - BALKAN meeting '2003 in SOFIA, July 01-02 (2003), Sofia, **Bulgaria**.