

## **Prof. OZAN TEKİNALP**

### **Personal Information**

**Email:** tekinalp@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/tekinalp>

### **Education Information**

Doctorate, University Of Michigan, Mechanical Engineering And Applied Mechanics Department, United States Of America  
1983 - 1988

Postgraduate, University of Michigan, College of Engineering, Mechanical Engineering and Applied Mechanics, United  
States Of America 1982 - 1983

Undergraduate, İstanbul Teknik Üniversitesi, Makine Fakültesi, Makine Mühendisliği Bölümü, Turkey 1976 - 1981

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Dynamic Modeling of Drill Bit Vibrations, University Of Michigan, Mechanical Engineering And Applied  
Mechanics Department, 1988

### **Research Areas**

Aeronautical and Space Engineering, Aeronautical Engineering , Space Engineering, Flight Sciences, Aircraft System  
Technologies, Task, Flight Dynamics and Stability, Flight Control Systems, Spacecraft Dynamics Modeling, Orientation and  
Orbit Control, Engineering and Technology

### **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 1988 -  
Continues

### **Academic and Administrative Experience**

Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2009 - 2018

### **Advising Theses**

TEKİNALP O., Formation flight design using natural dynamics for halo orbiting and earth orbiting spacecraft, Doctorate,  
A.Kutlu(Student), 2020

Tekinalp O., Vibration based and miniaturizable satellite attitude actuator, Doctorate, B.AKBULUT(Student), 2019

Tekinalp O., Design, development and control of a hybrid uav, Postgraduate, A.MURATOĞLU(Student), 2019

Tekinalp O., Orbit determination strategy and verification for geosynchronous satellites, Postgraduate, A.KÖKER(Student), 2019

TEKİNALP O., Smooth slew maneuvers of flexible spacecraft, Postgraduate, S.SALTINIŞIK(Student), 2019

Tekinalp O., Modeling and control of quadrotor formations carrying aslung load, Doctorate, S.OLUMIDE(Student), 2019

Tekinalp O., Control system design and implementation of a tilt rotor UAV, Postgraduate, L.CEVHER(Student), 2019

TEKİNALP O., Design, modeling and control of a hybrid UAV, Postgraduate, A.Muratoğlu(Student), 2019

TEKİNALP O., Polynomial trajectory shaping guidance algorithm for multi-missile salvo attack, Postgraduate, N.BAŞAK(Student), 2018

TEKİNALP O., Autonomous spacecraft rendezvous and docking on safe trajectories, Postgraduate, A.TEVFİK(Student), 2018

TEKİNALP O., Development of state dependent factorized optimal control methods with application to spacecraft Coulomb formations, Doctorate, M.MEHDI(Student), 2017

Kurtuluş D. F. , Tekinalp O., Modelling and Controller Design of a VTOL Air Vehicle, Postgraduate, A.Sami(Student), 2015

TEKİNALP O., Separation simulation for helicopter external stores and generation of safe separation envelopes, Postgraduate, Ö.KAPULU(Student), 2015

TEKİNALP O., Nonlinear guidance and control of leader-follower UAV formations, Postgraduate, S.KUMBASAR(Student), 2015

TEKİNALP O., Faux riccati equation techniques for feedback control of nonlinear and time-varying systems, Doctorate, A.PRACH(Student), 2015

TEKİNALP O., Nonlinear control of unmanned aircraft formations, Postgraduate, S.ARIYIBI(Student), 2014

TEKİNALP O., YAVRUCUK İ., Developing an investment decision methodology for helicopter systems related to technology factor and base price, Postgraduate, G.KARA(Student), 2014

TEKİNALP O., High by-pass turbofan engines aerothermodynamic design and optimization, Postgraduate, S.Arayibi(Student), 2014

TEKİNALP O., Response surface based performance analysis of an air-defense missile system, Postgraduate, K.GÜNAYDIN(Student), 2014

TEKİNALP O., Attitude control of an earth orbiting solar sail satellite to progressively change the selected orbital element, Postgraduate, Ö.ATAŞ(Student), 2014

TEKİNALP O., System identification using flight test data, Postgraduate, O.ŞİMŞEK(Student), 2014

TEKİNALP O., Satellite attitude determination based on GPS carrier phase measurements, Postgraduate, E.ÖZTEN(Student), 2013

TEKİNALP O., Evaluation of rotorcraft system identification approaches, Postgraduate, S.KAYMAK(Student), 2013

TEKİNALP O., Conceptual design optimization of a nano-satellite launcher, Postgraduate, Y.EMRE(Student), 2012

TEKİNALP O., Control of a satellite with flexible smart beam during slew maneuver, Postgraduate, H.ÜREK(Student), 2011

TEKİNALP O., External geometry and flight performance optimization of turbojet propelled air to ground missiles, Postgraduate, E.DEDE(Student), 2011

TEKİNALP O., YAVRUCUK İ., Development of a UAV testbed, Postgraduate, Z.ÇAKIR(Student), 2011

TEKİNALP O., YAVRUCUK İ., Development of control allocation methods for satellite attitude control, Postgraduate, T.ÇİĞDEM(Student), 2010

TEKİNALP O., Flight control system design for an over actuated UAV against actuator failures, Postgraduate, S.İŞİK(Student), 2010

TEKİNALP O., Multiobjective design optimization of rockets and missiles, Postgraduate, M.YAVUZ(Student), 2009

ÖZGÖREN M. K. , TEKİNALP O., Attitude control of multiple rigid body spacecraft with flexible hinge joints, Postgraduate, B.AKBULUT(Student), 2009

TEKİNALP O., YAVRUCUK İ., Multidisciplinary and multiobjective design optimization of an unmanned combat aerial vehicle (UCAV), Postgraduate, N.ÇAVUŞ(Student), 2009

TEKİNALP O., Flight control of a tilt duct UAV with emphasis on the over actuated transition flight phase, Postgraduate, T.ÜNLÜ(Student), 2009

TEKİNALP O., Flight simulation and control of a helicopter, Postgraduate, G.HİLAL(Student), 2008

TEKİNALP O., Design of kalman filter based attitude determination algorithms for a leo satellite and for a satellite attitude control test setup, Postgraduate, A.KUTLU(Student), 2008

TEKİNALP O., Control allocation against actuator failures in overactuated small satellites, Postgraduate, Ö.KAHRAMAN(Student), 2007

TEKİNALP O., Steering of redundant robotic manipulators and spacecraft integrated power and attitude control-control moment gyroscopes, Postgraduate, A.ALTAY(Student), 2006

TEKİNALP O., A layerwise approach to modeling piezolaminated plates, Doctorate, C.LEVENT(Student), 2005

TEKİNALP O., Multi objective conceptual design optimization of an agricultural aerial robot, Postgraduate, S.ÖZDEMİR(Student), 2005

TEKİNALP O., Multi objective conceptual design optimization of an agricultural aerial robot (AAR), Postgraduate, S.Özdemir(Student), 2005

TEKİNALP O., Simulated annealing for the generation of pareto fronts with aerospace applications /, Postgraduate, G.KARSLI(Student), 2004

TEKİNALP O., Steering laws for control moment gyroscope systems used in spacecrafts attitude control, Postgraduate, E.YAVUZOĞLU(Student), 2003

TEKİNALP O., Development of a flexible satellite simulator and associated control algorithms., Postgraduate, K.TAYLAN(Student), 2002

TEKİNALP O., Guidance and control of a spinning missile, Postgraduate, B.SEMERCİ(Student), 2001

TEKİNALP O., Missile trajectory optimization using genetic algorithm, Postgraduate, M.SOYLUOĞLU(Student), 2001

TEKİNALP O., Optimization of north south station keeping manoeuvres for geostationary satellites, Postgraduate, Z.YILDIZ(Student), 2001

TEKİNALP O., Modeling and control of a tilt-duct VTOL UAV, Postgraduate, A.OKAN(Student), 2000

TEKİNALP O., Multi-disciplinary design optimization of missiles, Postgraduate, M.BİNGÖL(Student), 2000

TEKİNALP O., Neural network initialization of strapdown inertial navigation systems, Postgraduate, M.Özemre(Student), 2000

TEKİNALP O., Neural network initialization of strapdown inertial navigation systems, Postgraduate, M.ÖZEMRE(Student), 2000

TEKİNALP O., Multi-disciplinary design optimization of missiles, Postgraduate, M.Bingöl(Student), 2000

TEKİNALP O., 3- Axis attitude control of a geostationary satellite, Postgraduate, H.ÖZGÜR(Student), 1999

TULUNAY Y., TEKİNALP O., Modeling and simulation of the Türksat 1B Satellite using artificial neural networks, Postgraduate, A.Türker(Student), 1999

TEKİNALP O., Missile design optimization using simulated annealing technique, Postgraduate, S.Utalay(Student), 1999

TEKİNALP O., Missile design optimization using simulated annealing techniuie, Postgraduate, S.UTALAY(Student), 1999

TEKİNALP O., Robust control of a highly maneuverable aircraft, Postgraduate, M.ERGÜN(Student), 1998

TULUNAY Y., TEKİNALP O., Investigation of minimum fuel maneuvers of Türksat 1B satellite with possible use of its simulator, Postgraduate, T.Erdal(Student), 1998

TEKİNALP O., Modelling and control of beam type structures with surface bonded piezoelectric sensors and actuators, Postgraduate, B.YAĞCI(Student), 1998

TEKİNALP O., TULUNAY Y., Modeling and control of beam type structures with surface bonded piezoelectric sensors and actuators, Postgraduate, B.Yağcı(Student), 1998

TEKİNALP O., TULUNAY Y., Orbit dynamics attitude dynamics and control:Investigation into possible applications to Türksat, Postgraduate, H.Özge(Student), 1997

TEKİNALP O., Orbit dynamics, attitude dynamics and control: Investigation into possible applications to TURKSAT, Postgraduate, H.ÖZGE(Student), 1997

TEKİNALP O., Optimal trajectories for air-to-surface missiles using direct collocation and nonlinear programming, Postgraduate, E.MURAT(Student), 1996

TEKİNALP O., Optimal trajectories for air-tosurfaces missiles using direct collocation and nonlinear programming, Postgraduate, E.Murat(Student), 1996

TEKİNALP O., Free vibration analysis of multi-layer adhesively bonded rotating beams, Postgraduate, A.KADİR(Student), 1992

TEKİNALP O., Free vibration analysis of adhesively bonded multi-layer beams and lap-joints, Postgraduate, N.ÇAĞLAYAN(Student), 1992

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Long term and safe relative orbit design for heterogeneous spacecraft clusters**  
Yaglioglu B., TEKİNALP O.  
Advances in Space Research, vol.67, no.11, pp.3546-3558, 2021 (Journal Indexed in SCI)
- II. **Quaternion-based nonlinear attitude control of quadrotor formations carrying a slung load**  
Ariyibi S. O. , TEKİNALP O.  
AEROSPACE SCIENCE AND TECHNOLOGY, vol.105, 2020 (Journal Indexed in SCI)
- III. **Output-feedback control of linear time-varying and nonlinear systems using the forward propagating Riccati equation**  
Prach A., TEKİNALP O., Bernstein D. S.  
JOURNAL OF VIBRATION AND CONTROL, vol.24, no.7, pp.1239-1263, 2018 (Journal Indexed in SCI)
- IV. **Solving Constrained Optimal Control Problems Using State-Dependent Factorization and Chebyshev Polynomials**  
Gomroki M. M. , Topputo F., Bernelli-Zazzera F., TEKİNALP O.  
JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, vol.41, no.3, pp.618-631, 2018 (Journal Indexed in SCI)
- V. **Infinite-Horizon Linear-Quadratic Control by Forward Propagation of the Differential Riccati Equation**  
Prach A., TEKİNALP O., Bernstein D. S.  
IEEE CONTROL SYSTEMS MAGAZINE, vol.35, no.2, pp.78-93, 2015 (Journal Indexed in SCI)
- VI. **A new multiobjective simulated annealing algorithm**  
Tekinalp O., Karsli G.  
JOURNAL OF GLOBAL OPTIMIZATION, vol.39, no.1, pp.49-77, 2007 (Journal Indexed in SCI)
- VII. **A new steering law for redundant control moment gyroscope clusters**  
Tekinalp O., Yavuzoglu E.  
AEROSPACE SCIENCE AND TECHNOLOGY, vol.9, no.7, pp.626-634, 2005 (Journal Indexed in SCI)
- VIII. **A layerwise approach to piezo-electric plates accounting for adhesive flexibility and delaminated regions**  
Erturk C., Tekinalp O.  
COMPUTERS & STRUCTURES, vol.83, pp.279-296, 2005 (Journal Indexed in SCI)
- IX. **Simulated annealing for missile optimization: Developing method and formulation techniques**  
Tekinalp O., Bingol M.  
JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, vol.27, no.4, pp.616-626, 2004 (Journal Indexed in SCI)
- X. **Tilt duct vertical takeoff and landing uninhabited aerial vehicle concept design study**  
Armutcuoglu O., Kavsaoglu M., Tekinalp O.  
JOURNAL OF AIRCRAFT, vol.41, no.2, pp.215-223, 2004 (Journal Indexed in SCI)
- XI. **Turkish Small Satellite Program: Goals and policies**  
Askar M., Tekinalp O.  
ACTA ASTRONAUTICA, vol.46, pp.375-378, 2000 (Journal Indexed in SCI)
- XII. **Free bending vibrations of adhesively bonded orthotropic plates with a single lap joint**  
Yuceoglu U., Toghi F., Tekinalp O.  
JOURNAL OF VIBRATION AND ACOUSTICS-TRANSACTIONS OF THE ASME, vol.118, no.1, pp.122-134, 1996 (Journal Indexed in SCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Maneuver planning strategy for rapid response solar sail satellite concept**  
POLAT H., TEKİNALP O.  
AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2021, Virtual, Online, 11 - 15 January 2021, pp.1-17
- II. **Oscillating Control Moment Gyroscope Mathematical Model Development, Verification and Results**  
AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.  
International Symposium on Space Technology and Science, Fukui, Japan, 15 - 21 June 2019
- III. **A MISSION ANALYSIS SOFTWARE FOR SMALL SATELLITES**  
KOPRUCÜ S. U. , ÖZÇELİK S. A. , ALTUNAY Ş., YAĞLIOĞLU B., TEKİNALP O.  
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- IV. **LATERAL-DIRECTIONAL CONTROL OF A HIGHLY MANEUVERABLE JET AIRCRAFT BASED ON COMBINATION OF MODAL AND OPTIMAL CONTROL THEORY**  
MESCE V., TEKİNALP O.  
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- V. **INCORPORATING REAL LIFE DESIGN PROBLEMS INTO THE AEROSPACE CURRICULUM**  
TEKİNALP O.  
10TH ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- VI. **SCATTER AND SENSITIVITY ANALYSIS OF A PROJECTILE MODELED UNDER MAGNUS EFFECT**  
MUHİDDİNOĞLU A., YAYLA K., TEKİNALP O.  
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- VII. **Long Term and Safe Relative Orbit Design for Heterogenously Distributed Spacecraft Clusters**  
YAĞLIOĞLU B., TEKİNALP O.  
International Workshop on Satellite Constellations and Formation Flying, Glasgow, England, 16 - 19 July 2019
- VIII. **Slew Maneuver Control of Flexible Spacecraft**  
ALTINIŞIK S., TEKİNALP O.  
8TH EUROPEAN CONFERENCE FOR AERONAUTICS AND SPACE SCIENCES (EUCASS), Madrid, Spain, 1 - 04 July 2019
- IX. **Passively Safe Relative Orbit Configurations over LongTime Intervals for Heterogeneously Distributed SpacecraftClusters**  
YAĞLIOĞLU B., TEKİNALP O.  
8TH EUROPEAN CONFERENCE FOR AERONAUTICS AND SPACE SCIENCES (EUCASS), Madrid, Spain, 1 - 04 July 2019
- X. **Control of a Quadrotor Formation Carrying a Slung Load Using Flexible Bars**  
TEKİNALP O., ARIYIBI S.  
AIAA Aviation 2019 Forum, Dallas, Texas, United States Of America, 17 - 21 June 2019
- XI. **Safe Spacecraft Rendezvous Using Dual Quaternions on Time-Dependent Trajectories Generated by Model Predictive Control**  
TEKİNALP O., BÜYÜKKOÇAK A. T.  
AIAA Scitech 2019 Forum, San Diego, California, United States Of America, 7 - 11 January 2019
- XII. **Oscillating Control Moment Gyroscope Experimental Results**  
AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.  
AIAA Scitech 2019 Forum, San Diego, California, United States Of America, 7 - 11 January 2019
- XIII. **SAFE SPACECRAFT RENDEZVOUS WITH CONSTRAINED MODEL PREDICTIVE CONTROL**  
BÜYÜKKOÇAK A. T. , TEKİNALP O.  
AAS/AIAA Astrodynamics Specialist Conference, Utah, United States Of America, 19 - 23 August 2018, vol.167, pp.883-895
- XIV. **Solar Sail Application with a Proposed Low Earth Orbit Mission Concept**  
Polat H. C. , TEKİNALP O.  
9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.285-291
- XV. **TRACKING CONTROL OF SPACECRAFT ATTITUDE AND POSITION ON TIME DEPENDENT**

## **TRAJECTORIES USING DUAL QUATERNIONS**

BÜYÜKKOÇAK A. T. , TEKİNALP O.

AAS/AIAA Astrodynamics Specialist Conference, Utah, United States Of America, 19 - 23 August 2018, vol.167, pp.1411-1422

- XVI. **A Multi-National Multi-Institutional Educaiton Framework: APSCO SSS-2B CubeSat Project**  
Yaglioglu B., Atas O., Kahraman D., Kose S., TEKİNALP O., Suer M.  
9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.553-557
- XVII. **Formation Flight Design near Sun-Earth Collinear Libration Points under the Effect of Disturbances**  
Kutlu A., TEKİNALP O.  
9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.137-144
- XVIII. **Safe Spacecraft Rendezvous with Constraint Model Predictive Control**  
TEKİNALP O., BÜYÜKKOÇAK A. T.  
AIAA/ American Astronautical Society Astrodynamics Specialst Conference, Snowbird, Utah, United States Of America, 19 - 23 August 2018
- XIX. **Orbit Estimation Strategy for Low Earth Orbit and Geostationary Satellites**  
TEKİNALP O., KÖKER A.  
AIAA/American Astronautical Society, 2018 Astrodynamics Specialst Conference, Snowbird, Utah, United States Of America, 19 - 23 August 2018
- XX. **A Hypothetical Mechanical Design for Vibrating Mass Control Moment Gyroscopes**  
BURAK A., ARBERKLİ F., TEKİNALP O., AZGIN K.  
2018 Space Flight Mechanics Meeting, Kissimmee, Florida, United States Of America, 8 - 12 January 2018
- XXI. **Modeling and Control of Quadrotor Formations Carrying a Slung Load**  
ARIYIBI S., TEKİNALP O.  
2018 AIAA Information Systems-AIAA Infotech @ Aerospace, Kissimmee, Florida, United States Of America, 8 - 12 January 2018
- XXII. **Nonlinear optimal adaptive transition control of a tolt-prop VTOL UAV**  
Senipek M., YAYLA M., Gungor O., Cevher L., KUTAY A. T. , TEKİNALP O.  
44th European Rotorcraft Forum 2018, ERF 2018, Delft, Netherlands, 18 - 21 September 2018, vol.2, pp.952-964
- XXIII. **Angle Only Orbit Determination Using a Telescope System**  
KÖKER A., TEKİNALP O.  
9th Ankara International Aerospace Conference, 20 - 22 September 2017
- XXIV. **Constrained Model Predictive Control for Spacecraft Rendezvous**  
BÜYÜKKOÇAK A. T. , ALTINIŞIK S., TEKİNALP O.  
9th Ankara International Aerospace Conference, 20 - 22 September 2017
- XXV. **Experimental Characterization and Validation of Vibrating Rotor Control Moment Gyroscope**  
AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.  
AIAA SPACE and Astronautics Forum and Exposition, Orlando, FL, United States Of America, 12 - 14 September 2017
- XXVI. **Effects of Rotor Geometry on the Performance of Vibrating Mass Control Moment Gyroscopes**  
ARBERKLİ F., AKBULUT B., AZGIN K., TEKİNALP O.  
AAS/AIAA Astrodynamics Specialist Conference, Columbia River George, Stevenson, WA, United States Of America, 20 - 24 August 2017
- XXVII. **Experimental Investigation of Optimal Gap Distance between Rotors of a Quadrotor UAV**  
KAYA D. D. , KUTAY A. T. , TEKİNALP O.  
AIAA Aviation Forum 2017, Atmospheric Flight Mechanics Conference, 5 - 09 June 2017
- XXVIII. **A SIMPLIFIED MODEL FOR VIBRATING MASS CONTROL MOMENT GYROSCOPE**  
Akbulut B., Arberkli F., AZGIN K., TEKİNALP O.  
27th AAS/AIAA Space Flight Mechanics Meeting, San-Antonio, Northern Mariana Islands, 5 - 09 February 2017, vol.160, pp.2961-2974

- XXIX. **ORBIT TRANSFER OF AN EARTH ORBITING SOLAR SAIL CUBESAT**  
Atas O., TEKİNALP O.  
27th AAS/AIAA Space Flight Mechanics Meeting, San-Antonio, Northern Mariana Islands, 5 - 09 February 2017, vol.160, pp.2201-2212
- XXX. **Main Rotor Downwash Effect on Separation Characteristics of External Stores**  
Kapulu Ö., TEKİNALP O.  
AIAA SciTech 2017, Atmospheric Flight Mechanics Conference, 9 - 13 January 2017
- XXXI. **A Novel Flight Control Algorithm for Multicopters**  
TEKİNALP O., Kumbasar S.  
30th Congress of International Council of Aeronautical Sciences, 26 - 29 September 2016
- XXXII. **Tracking Control of Spacecraft Attitude on Time Dependent Trajectories**  
TEKİNALP O., TEKİNALP A.  
Space 2016, AIAA/AAS Astrodynamics Specialist Conference, Long Beach, CA, United States Of America, 13 - 16 September 2016
- XXXIII. **Vibrating Mass Control Moment Gyroscope Dynamic Model Validation**  
AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.  
AIAA/AAS Astrodynamics Specialist Conference, Long Beach, California, United States Of America, 13 - 16 September 2016
- XXXIV. **Propulsion System Selection and Modeling for a Quadrotor with Search and Rescue Mission**  
KAYA D., KUTAY A. T. , KURTULUŞ D. F. , TEKİNALP O., ŞİMŞEK İ., SOYSAL S., HOSGİT G.  
54th AIAA Aerospace Sciences Meeting, San Diego, United States Of America, 4 - 08 January 2016
- XXXV. **Comparison of Time and Frequency Domain Identification of Fixed Wing UAV**  
ŞİMŞEK O., AS H., ORHAN E., TEKİNALP O.  
AIAA, SCITECH 2016, SAN DIEGO, CA, United States Of America, 4 - 08 January 2016
- XXXVI. **Nonlinear Aircraft Flight Control Using Forward Propagating Riccati Equation**  
PRACH A., TEKİNALP O., BERNSTEIN D.  
AIAA SCITECH 2016, SAN DIEGO, CA, United States Of America, 4 - 08 January 2016
- XXXVII. **Design and control of a micro UAV**  
Kaya D., Büyükköçak A. T. , KUTAY A. T. , TEKİNALP O.  
AIAA Atmospheric Flight Mechanics Conference, 2016, California, United States Of America, 4 - 08 January 2016
- XXXVIII. **NONLINEAR TRACKING ATTITUDE CONTROL OF SPACECRAFT ON TIME DEPENDENT TRAJECTORIES**  
TEKİNALP O., Gomroki M. M. , Atas O.  
AAS/AIAA Astrodynamics Specialist Conference, Colorado, United States Of America, 11 - 13 August 2015, vol.156, pp.1585-1597
- XXXIX. **SOLAR SAIL SPACECRAFT BOOM VIBRATION DURING DEPLOYMENT AND DAMPING MECHANISMS**  
Atas O., Demiral E., TEKİNALP O.  
AAS/AIAA Astrodynamics Specialist Conference, Colorado, United States Of America, 11 - 13 August 2015, vol.156, pp.2189-2202
- XL. **Solar Sail Spacecraft Boom Vibration During Deployment and Damping Analysis**  
TEKİNALP O., DEMİREL E., ATAŞ Ö.  
AAS/AIAA ASTRODYNAMICS SPECIALIST CONFERENCE, Vail, Colorado, United States Of America, 9 - 13 August 2015
- XLI. **Nonlinear Tracking Attitude Control on Time Dependent Trajectories**  
TEKİNALP O., GOMROKI M. M. , ATAŞ Ö.  
AAS/AIAA Astrodynamics Specialist Conference, Vail, Colorado, United States Of America, 9 - 13 August 2015
- XLII. **Vibrationally Excited Satellite Attitude Actuator: a Feasibility Study**  
Akbulut B., TEKİNALP O., AZGIN K.  
7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.183-186
- XLIII. **Two ASRE Approaches with Application to Spacecraft Coulomb Formations**  
Gomroki M. M. , Topputo F., TEKİNALP O., Bernelli-Zazzera F.

AstroNet-II International Final Conference, Tossa de Mar, Spain, 15 - 19 June 2015, vol.44, pp.109-120

- XLIV. **Vibrationally Excited Satellite Attitude Actuator A Feasibility Study**  
TEKİNALP O., AKBULUT B., AZGIN K.  
RAST 2015, Recent Advances on Space Technologies, İstanbul, Turkey, 16 - 19 June 2015
- XLV. **Fuzzy Logic Guidance of Formation Flight**  
Kumbasar S., TEKİNALP O.  
International Conference on Unmanned Aircraft Systems (ICUAS), Colorado, United States Of America, 9 - 12 June 2015, pp.167-175
- XLVI. **Modeling and Controller Design of a VTOL UAV**  
Onen A. S., Cevher L., Şenipek M., Mutlu T., Gungor O., Uzunlar I. O., Kurtulus D. F., Tekinalp O.  
International Conference on Unmanned Aircraft Systems (ICUAS), Colorado, United States Of America, 9 - 12 June 2015, pp.329-337
- XLVII. **STATE DEPENDENT RICCATI EQUATION CONTROL OF COLLINEAR SPINNING THREE-CRAFT COULOMB FORMATIONS**  
Gomroki M. M., TEKİNALP O.  
25th American-Astronautical-Society/American Institute of Aeronautics and Astronautics Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.643-657
- XLVIII. **ARCHITECTURES FOR VIBRATING MASS ATTITUDE CONTROL ACTUATORS**  
Akbulut B., TEKİNALP O.  
25th American-Astronautical-Society/American Institute of Aeronautics and Astronautics Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.3509-3528
- XLIX. **ATTITUDE CONTROL OF AN EARTH ORBITING SOLAR SAIL SATELLITE TO PROGRESSIVELY CHANGE THE SELECTED ORBITAL ELEMENT**  
Atas O., TEKİNALP O.  
25th American-Astronautical-Society (AAS)/American-Institute-of-Aeronautics-and-Astronautics (AIAA) Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.3529-3546
- L. **Architectures for Vibrating Mass Attitude Control Actuators**  
TEKİNALP O., BURAK A.  
AIAA/AAS Space Flight Mechanics Meeting, Williamsburg, Virginia, United States Of America, 12 - 15 January 2015
- LI. **Attitude Control of an Earth Orbiting Solar Sail Satellite to Progressively Change the Selected Orbital Elements**  
TEKİNALP O., ATAS Ö.  
AAS/AIAA Space Flight Mechanics Meeting, Williamsburg, Virginia, United States Of America, 12 - 15 January 2015
- LII. **State Dependent Riccati Equation Control of Spinning Three Craft Coulomb Formations**  
TEKİNALP O., MOHAMMAD MEHDI G.  
AIAA/AAS space Flight Mechanics Meeting, Williamsburg, Virginia, United States Of America, 12 - 15 January 2015
- LIII. **System Identification and Handling Quality Analysis of a UAV from Flight Test Data**  
TEKİNALP O., ŞİMŞEK O.  
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