

Doç Dr. Serdar SELAMET

İnşaat Mühendisliği Bölümü
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OFİS

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UZMANLIK ALANLARI

Yapı mühendisliği:

Çelik yapılar, yanın mühendisliği, hafif çelik yapı tasarımları, çelik bağlantı tasarımları, yüksek katlı bina yanın ve tahliyesi, sonlu elemanlar yöntemi, sürdürülebilir yapılar.

PROFESYONEL İŞ TECRÜBESİ

Boğaziçi Üniversitesi, İstanbul Türkiye
Doçent Dr.
İnşaat Mühendisliği Bölümü

Ekim 2017 -

Boğaziçi Üniversitesi, İstanbul Türkiye
Yard. Doçent Dr.
İnşaat Mühendisliği Bölümü

Ocak 2012 – Ekim 2017

İDARI GÖREVLER:

- Fakulte Kurulu Mart 2021 -
- Bölüm Başkanı Yardımcılığı Ocak 2018 – Aralık 2018
- ABET Akreditasyon İnşaat Mühendisliği Bölüm Temsilcisi Ocak 2014-Aralık 2015

Yüksek Lisans Dersleri:

CE549 Structural Fire Safety: Theory and Applications, CE502 Introduction to Finite Elements, CE58S Advanced Steel Design and Behavior of Steel Structures

Lisans Dersleri

CE245 Mechanics, CE246 Strength of Materials, CE353 Steel Structures, CE355 Structural Analysis, CE492 Project, CE49S Fire Engineering Design

ÖNCEKİ İŞ TECRÜBESİ:

University of Manchester, Manchester UK Mart 2016- Eylül 2017
Newton Programı Ziyaretçi Profesör
School of Mechanical, Aerospace and Civil Engineering
Araştırma Alanı: "Resilient and Sustainable Structural Engineering Risk Assessment of Tall Residential Buildings for Structural Fire Safety"

Doç Dr. Serdar SELAMET

UC Berkeley, Berkeley CA June 2014 - October 2014
Ziyaretçi Araştırmacı
Department of Civil and Environmental Engineering
Araştırma Alanı: Investigation of seat connections in World Trade Center Towers 1/2

Princeton Üniversitesi, Princeton NJ Mayıs 2011 - Aralık 2011
Doktora Sonrası Araştırma Görevlisi (Post-Doc),
İnşaat ve Çevre Mühendisliği Bölümü
Araştırma Alanı: Çelik köprüler ve yangın ile ilgili bina çökmeleri

EĞİTİM

Princeton Üniversitesi, Princeton NJ Haziran 2008 - Mayıs 2011
Doctor of Philosophy (Ph.D.)
İnşaat ve Çevre Mühendisliği Bölümü

Doktora Tezi: "Behavior, Design and Finite Element Modeling of Shear Connections under Fire Hazard"
Serdar Selamet, Ph.D., Princeton University, 2011: 287 sayfa
URL: <http://search.proquest.com/docview/879743374?accountid=9645>

Princeton Üniversitesi, Princeton NJ Eylül 2006 - Mayıs 2008
Mühendislik Masteri(M.A.)
İnşaat ve Çevre Mühendisliği Bölümü

Duke Üniversitesi, Durham NC Ağustos 2002 - Mayıs 2006
B.Sc.
İnşaat Mühendisliği Bölümü

İstanbul Özel Alman Lisesi Eylül 1994 - Haziran 2002
Fen Bilimleri Lise Diploması (Gymnasium)
ABITUR

ÜSTÜN BAŞARI ÖDÜLLERİ VE DİĞER AKADEMİK BAŞARILAR

- TUBITAK Proje Performans Ödülü (PPÖ) 114M791 "Fire Performance of Steel Connections in Composite Floor Systems" (2018)
- Newton (İngiltere) Araştırma Programı Bursu (2016-2017)
- TUBITAK Avrupa Projeleri başarı bursu (2015)
- Öğretimde Üstün Başarı Ödülü Bölüm Birincisi (2014)
- Marie Curie International Incoming Fellowship IIF (2013-2015)

Değerlendirme Puanı: 4.99/5.0

Türkiye'de bugüne kadar Avrupa Çerçeve araştırma önerileri için elde en yüksek skor, BÜTÇE: 166,000 €

Doç Dr. Serdar SELAMET

- Princeton Üniversitesi 1. yıl Bursu (2006-2007)
- Princeton Üniversitesi İnşaat Mühendisliği (CEE) Ödülü (2006)
- Yüksek lisans ve doktora kabul ve burs desteği: Harvard Üniversitesi, MIT, Stanford Üniversitesi, Columbia Üniversitesi ve Almanya'daki Stuttgart Üniversitesi (2006) -- (hepsi Princeton Üniversitesi kabulü için kullanılmadı)
- Duke Üniversitesi "International Honors" Programı (2006)
- Duke Üniversitesi "Pratt Undergraduate Research Fellowship" (2005-2006)
- Chi Epsilon (XE) National Civil Engineering Honor Society (2005)
- Alman Dili ve Edebiyatı Helga Wilde Bessent Bursu (2004)
- Delta Phi Alpha German Honor Society (2003-2006)
- Miami Üniversitesi "Junior Scholar" Programı, Oxford, OH (2001)

ARAŞTIRMA PROJELERİ

- Boğaziçi Üniversitesi Bilimsel Araştırma Projesi **BAP Doktora** (2018-2021)
- **TUBITAK 1002** Hızlı Destek Fonu (2019-2020)
- Boğaziçi Üniversitesi Bilimsel Araştırma Projesi **BAP Doktora** (2017-2020)
- **Royal Society of Engineering: Newton Collaborative Research Programme** (2016-2017)
- **TUBITAK 3001**: Baslangic Ar-Ge Projeleri Destekleme Fonu (2015-2016)
- **Marie Curie International Incoming Fellowship IIF** (2013-2015)
- Boğaziçi Üniversitesi Bilimsel Araştırma Projesi **BAP Standart** (2013-2016)

MESLEKİ ÜYELİKLER

- IMSAD ve TUCSA Yangın Komite Teknik Üyesi ve Başkan Yardımcısı
- ASCE Yangın Komitesi Teknik Üyesi
- NIST, NFPA, SIF, IAFSS Aktif Üyesi
- SCI-E, SCI Makalelerinde Hakemlik: Fire Safety Journal, Fire Technology, Journal of Constructional Steel Research, Engineering Structures, Computers and Structures

MAKALELER

- (1) **Selamet S**, Ayva B (in press 2023). Car fires in multi-story parking garages. Turkish Journal of Civil Engineering.
- (2) **Selamet S**, Ozer AY, Ildan KB (2023). Experimental Study on the Fire Performance of Prestressed Steel Parallel Wire Strands. *Engineering Structures* 280, 115709. <https://doi.org/10.1016/j.engstruct.2023.115709>
- (3) Dundar U, **Selamet S** (2023). Fire load and fire growth characteristics in modern high-rise buildings. *Fire Safety Journal* 135, 103710. <https://doi.org/10.1016/j.firesaf.2022.103710>
- (4) Jodi M, **Selamet S**, Wang YC (2022). City-wide fire vulnerability map of high-rise residential buildings. *Fire Technology*. <https://doi.org/10.1007/s10694-022-01344-w>
- (5) **Selamet S**, (2022). TEXTBOOK. Fire Engineering (in Turkish). Nobel Academic Publishing. July, 282 pages. ISBN 978-625-417-965-5.
- (6) Calayir M, **Selamet S**, Wang YC (2022). Post-earthquake fire performance of fire door sets. *Fire Safety Journal*, 130, 103589.
- (7) **Selamet S**, Yolacan TF (2018). Steel frame-concrete slab composite floor fire resistance experiment. *Teknik Dergi*, 28: 2131-2145.
- (8) **Selamet S** (2017). Thermal Gradient Estimation due to Surface Heat Exchange in Steel I-Sections. *Journal of Structural Engineering-ASCE*, 143(9): 04017101.
- (9) **Selamet S**, Caner Bolukbas (2016). Fire resilience of shear connections in a composite floor: Numerical investigation. *Fire Safety Journal*, 81: 97-108.
- (10) **Selamet S**, Caner Bolukbas (2015). Fire performance of single plate shear connections in a composite floor. *Journal of Structural Fire Engineering*, 7(4): 316-327.
- (11) **Selamet S**, Garlock ME (2014). Fire Resistance of Shear Connections. *Fire Safety Journal*, 68: 52-60.
- (12) **Selamet S**, Garlock ME (2013). Plate buckling in wide-flanged beams considering nonlinear steel behavior at elevated temperatures. *Journal of Structural Engineering, ASCE*, 139(11): 1853-1865.
- (13) Pakala P, Kodur V, **Selamet S**, Garlock M (2012). Fire behavior of shear angle connections in a restrained steel frame. *Journal of Constructional Steel Research* 77: 119-30.
- (14) **Selamet S** and Garlock ME (2012). Predicting the maximum compressive beam axial force during fire considering local buckling. *Journal of Constructional Steel Research* 71: 189-201.
- (15) **Selamet S** and Garlock ME (2010). Robust fire design of single plate shear connections. *Engineering Structures*, 32(8): 2367 – 2378.

- (16) Garlock ME and **Selamet S** (2010). Modeling and behavior of steel plate connections subject to various fire scenarios. Journal of Structural Engineering, 136(7): 897–906.

KONFERANS BİLDİRİLERİ

- (1) **Selamet S** (2023). Car fires in multi-story parking garages. SFPE European Conference & Expo, Berlin, Germany.
- (2) **Selamet S** (2022). Determining SFRM thermal properties through fire tests on I-beam sections. 12th International Conference on Structures in Fire (SIF), Hong Kong.
- (3) **Selamet S** (2022). Post-fire Stability and Performance of Tall Steel Buildings, Engineering Mechanics Institute, Baltimore, MD USA.
- (4) Dundar U, **Selamet S** (2021). FDS Analysis of a High-Rise Residential Building in Istanbul, 14th International Congress on Advances in Civil Engineering (ACE).
- (5) Onursal A, **Selamet S** (2019). Türkiye'deki Üniversitelerde Yangın Mühendisliği Müfredat Programı, 6th International Scientific Research Congress (UBAK). Şanlıurfa, Turkey.
- (6) Jodi M, **Selamet S** (2019). Yangın Koşulları Altındaki Yüksek Katlı Konutlarda Tahliye, 6th International Scientific Research Congress (UBAK). Şanlıurfa, Turkey.
- (7) **Selamet S**, Onursal A (2019). Stability of Steel Portal Frames in Industrial Buildings under Natural Fire Conditions, International Civil Engineering and Architecture Conference (ICEARCH). Trabzon, Turkey.
- (8) Jones M, **Selamet S**, Wang Y, Calis M. (2017). Fire safety of high-rise residential buildings: scope of fire engineering and comparison between UK and Turkish Practice. ASFE, Manchester, UK.
- (9) Gernay T, **Selamet S**, Tondini N, Khorasani NE, (2016). Urban infrastructure resilience to fire disaster: An overview. World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium (WMCAUS) - Procedia Engineering, Prague, Czech Republic
- (10) Yolacan TF, **Selamet S** (2016). Thermo-Mechanical Behavior of Steel Beam-Concrete Slab Composite Floors. Advances in Civil Engineering (ACE), Istanbul, Turkey.
- (11) **Selamet S**, Akbas E (2015). Reliability risk assessment of high-rise buildings in case of fire. 2nd International Conference on Performance-based and Life-cycle Structural Engineering (PLSE), Brisbane, Australia.
- (12) **Selamet S**, Uzun M (2015). A novel and efficient finite element software for heat transfer: FEHEAT. 1st International Conference on Structural Safety under Fire and Blast (CONFAB), Glasgow, Scotland

- (13) **Selamet S**, Ozdemir T, Bolukbas C (2014). Fire performance of steel shear connections in a composite floor. 8th International Conference on Structures in Fire (SIF), Shanghai, China.
- (14) Ozdemir T, **Selamet S** (2013). Yüksek katlı yapılarda yangının çökmeye etkisi (in Turkish). TUYAK Third Symposium and Exhibition on Fire and Security, Istanbul, Turkey.
- (15) **Selamet S** (2013). The impact of fire scenario to the collapse of a tall structure. SEMC Fifth International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa.
- (16) Kilic SA, **Selamet S** (2013). Symmetric and asymmetric collapse mechanisms of a multi-story steel structure subjected to gravity and fire. ASCE Structures Congress: Bridging your passion with your profession, Pittsburgh, PA.
- (17) **Selamet S** (2013). Fire performance of an unprotected composite beam with semi-rigid end restraints. ASFE Applications of Structural Fire Engineering, Prague Czech Republic.
- (18) **Selamet S** and Garlock M (2011). A comparison between the single plate and angle shear connection performance under fire. ASCE Structures Congress: Don't Gamble on your Future, Las Vegas, NV.
- (19) **Selamet S** and Garlock ME. (2010). Local buckling study of flanges and webs in I-shapes at elevated temperatures. ASCE Structures Congress, pages 1592–1603, Orlando, FL.
- (20) **Selamet S** and Garlock M (2010). Improved details for fire-induced steel single plate shear connections. In Proceedings of the 6th International Conference on Structures in Fire (SIF), pages 621–628, East Lansing, MI.
- (21) **Selamet S** and Garlock M (2010). Guidelines for modeling three dimensional structural connection models using finite element methods. ECCS International Symposium Steel Structures: Culture and Sustainability 2010, pages 351–360, Istanbul, Turkey.
- (22) **Selamet S** and Garlock ME (2009). Modified connection details for single plate steel connections under fire. ASCE Structures Congress: Don't Mess with Structural Engineers, pages 642–649, Austin, TX.
- (23) **Selamet S** and Garlock M (2008). Behavior of steel plate connections subject to various fire scenarios. In Proceedings of the 5th International Conference on Structures in Fire (SIF), pages 139–149, Singapore.