

Assoc. Prof. BURCU BURAK BAKIR

Personal Information

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Education Information

Doctorate, University of Michigan, Faculty of Engineering, Civil And Environmental Engineering/Structural Engineering, United States Of America 2000 - 2005

Postgraduate, University of Michigan, Faculty of Engineering, Civil And Environmental Engineering/Structural Engineering, United States Of America 1998 - 2000

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 1994 - 1998

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, SEISMIC BEHAVIOR OF ECCENTRIC REINFORCED CONCRETE BEAM-COLUMN-SLAB CONNECTIONS, University Of Michigan, Civil And Environmental Engineering/Structural Engineering, 2005

Research Areas

Structure

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2014 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2007 - 2014

Lecturer, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2005 - 2007

Courses

Fiber Reinforced Cementitious Composite Structures, Postgraduate, 2009 - 2010, 2010 - 2011, 2011 - 2012, 2012 - 2013, 2015 - 2016

Advising Theses

- BURAK BAKIR B., Analytical modeling of fiber reinforced composite deep beams, Doctorate, E.YAĞMUR(Student), 2018
- BURAK BAKIR B., Influence of the shear wall area to floor area ratio on the seismic performance of existing reinforced concrete buildings, Postgraduate, A.ORHUN(Student), 2013
- BURAK BAKIR B., Seismic assessment of reinforced concrete beam-to-column connections under reversed cyclic loading, Postgraduate, U.AKIN(Student), 2011
- BURAK BAKIR B., Analytical modeling of reinforced concrete beam-to-column connections, Postgraduate, M.ÜNAL(Student), 2010
- BURAK BAKIR B., Effect of shear walls on the behavior of reinforced concrete buildings under earthquake loading, Postgraduate, H.GÜRHAN(Student), 2009

Designed Lessons

- Burak Bakır B., Fiber Reinforced Cementitious Composite Structures, Postgraduate, 2009 - 2010

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

- I. **Effect of Shear Wall Area to Floor Area Ratio on the Seismic Behavior of Reinforced Concrete Buildings**
BURAK BAKIR B., Comlekoglu H. G.
JOURNAL OF STRUCTURAL ENGINEERING, vol.139, no.11, pp.1928-1937, 2013 (Journal Indexed in SCI)
- II. **Development and analytical verification of an inelastic reinforced concrete joint model**
Unal M., BURAK BAKIR B.
ENGINEERING STRUCTURES, vol.52, pp.284-294, 2013 (Journal Indexed in SCI)
- III. **Performance of Beam-to-Column Connection of a Well-Detailed RC Moment Frame Building under Pseudodynamic Loading**
Unal M., BURAK BAKIR B.
JOURNAL OF STRUCTURAL ENGINEERING, vol.139, no.6, pp.886-896, 2013 (Journal Indexed in SCI)
- IV. **Joint shear strength prediction for reinforced concrete beam-to-column connections**
Unal M., BURAK BAKIR B.
STRUCTURAL ENGINEERING AND MECHANICS, vol.41, no.3, pp.421-440, 2012 (Journal Indexed in SCI)
- V. **Experimental investigation on seismic behavior of eccentric reinforced concrete beam-column-slab connections**
Canbolat B., Wight J. K.
ACI STRUCTURAL JOURNAL, vol.105, no.2, pp.154-162, 2008 (Journal Indexed in SCI)

Books & Book Chapters

- I. **Seismic Behavior of Eccentric R/C Beam-Column-Slab Connections under Sequential Loading in Two Principal Directions**
BURAK B., Wight J. K.
in: Innovations in Design with Emphasis on Seismic Wind and Environmental Loading Quality Control and Innovations in Materials Hot Weather Concreting, V. M. Malhotra, Editor, American Concrete Institute, pp.863-880, 2002

Refereed Congress / Symposium Publications in Proceedings

- I. **DİNAMİK BENZERİ DENEYLERLE YETERLİ DAYANIMA SAHİP BİR BETONARME ÇERÇEVENİN**

BİRLEŞİM BÖLGELERİNİN PERFORMANSININ İRDELENMESİ

BURAK B., ünal m.

2. TÜRKİYE DEPREM MÜHENDİSLİĞİ VE SİSMOLOJİ KONFERANSI, Turkey, 25 - 27 September 2013

II. Inelastic Modeling of Reinforced Concrete Beam-to-Column Connections

BURAK BAKIR B., ünal m.

10th International Congress on Advances in Civil Engineering (ACE), 17 - 19 October 2012

III. Analytical Evaluation of the Cyclic Response of Reinforced Concrete Beam-to-Column Connections

BURAK BAKIR B., ünal m.

15th World Conference on Earthquake Engineering, 24 - 28 September 2012

IV. Analytical Verification of a Simplified Reinforced Concrete Joint Model", Proceedings

BURAK B.

9th US National and 10th Canadian Conference on Earthquake Engineering, 25 - 29 July 2010

V. Influence of Shear Wall Index on the Seismic Performance of Reinforced Concrete Buildings

BURAK CANBOLAT B., SOYDAŞ O., YAKUT A.

WCEE-ECCE-TCCE Joint Conference on Earthquake and Tsunami, 22 - 24 June 2009

VI. Structural Applications of a Reinforced Concrete Beam-Column-Slab Connection Model for Earthquake Loading

BURAK CANBOLAT B.

14th World Conference on Earthquake Engineering, 12 - 17 October 2008

VII. Experimental Investigation of Eccentric RC Beam-Column-Slab Connections under Earthquake Loading

BURAK B., WIGHT J. K.

13th World Conference on Earthquake Engineering, 1 - 06 August 2004

VIII. Seismic behavior of eccentric R/C beam-column-slab connections under sequential loading in two principal directions

Burak B., Wight J.

5th International Conference of the American-Concrete-Institute, Cancun, Mexico, 01 December 2002, vol.209, pp.863-880

IX. Behavior of Eccentric Reinforced Concrete Beam-Column-Slab Connections under Cyclic Loading

BURAK B., WIGHT J. K.

US-Japan Cooperative Research on Urban Earthquake Disaster Mitigation, US-Japan Joint Workshop and Third Grantees Meeting, 16 - 18 August 2001

X. Modeling and Software Issues for Pushover Analysis of RC Structures

WIGHT J. K. , BURAK B., CANBOLAT B. A. , LIANG X.

US-Japan Workshop on Performance-Based Design Methodology for Reinforced Concrete Building Structures, 13 September 1999

Supported Projects

BURAK BAKIR B., Project Supported by Higher Education Institutions, Kiriş-Kolon Birleşim Bölgelerinin Sismik Davranışı İçin Geliştirilen Analitik Modelin Kalibrasyonu, 2009 - 2009

BURAK BAKIR B., Project Supported by Higher Education Institutions, Kriş-Kolon Birleşim Bölgelerinin Modellenmesinin Nonlinear Analize Etkisi, 2008 - 2008

Burak Bakır B., Project Supported by Higher Education Institutions, Kiriş Kolon Birleşim Bölgelerinin Deprem Yüğü Altındaki Davranışını Gösteren bir Model Geliştirilmesi, 2006 - 2007

Memberships / Tasks in Scientific Organizations

ACI-ASCE Committee 352, Principal Member, 2008 - Continues, United States Of America

Scientific Refereeing

TEKNIK DERGI, National Scientific Refreed Journal, December 2020

JOURNAL OF STRUCTURAL ENGINEERING-ASCE, SCI Journal, June 2020

Citations

Total Citations (WOS):80

h-index (WOS):5