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I. BACKGROUND**AREAS OF INTEREST:****TEACHING**

Earthquake analysis and design of structures
Reinforced concrete design
Bridge engineering
Advanced analytical techniques including nonlinear analysis and finite element methods
Computer methods in structural analysis and design
Use of Internet, World Wide Web, and Interactive Teaching Tools in education

RESEARCH

Use of supplemental damping to improve seismic behavior of structures
Performance-based seismic engineering of buildings
Earthquake analysis and design of plan-wise asymmetric buildings and bridges
Base isolation and energy dissipation devices
Experimental methods in structural dynamics
Studies on nonlinear behavior of structures

EDUCATION:

University of California, Berkeley, Ph.D. in Structural Engineering, November 1990, Ph.D.; Dissertation: "Inelastic Seismic Response of One-Story, Asymmetric-Plan Systems," Advisor: Prof. Anil K. Chopra.

University of California, Berkeley, M.S. in Structural Engineering, May 1985.

Indian Institute of Technology, New Delhi, B.Tech. in Civil Engineering, June 1982.

CERTIFICATION OR LICENSING:

Registered Professional Engineer (PE) in Civil Engineering, License No. C52300, State of California
Safety Assessment Program, CA Governor's Office of Emergency Services

MAJOR AWARDS:

Northrop Grumman Electronics Systems Excellence in Research and Development Award, Cal Poly, 2002.
Norman Medal, American Society of Civil Engineers, 2001.
Huber Research Prize, American Society of Civil Engineers, 2000.

MAJOR PROFESSIONAL RESPONSIBILITIES:

Associate Editor, *Journal of Structural Engineering*, American Society of Civil Engineers, December 2003-Present.
Chair, ASCE Sub-Committee on Emerging Analysis Methods in Earthquake Engineering (2007-Present)

MAJOR SERVICE TO THE UNIVERSITY

Chair, College of Engineering Task Force on Workload Relief for Faculty Engaged in Scholarly Activities (2006).
Chair of the Tenured Faculty, CE & ENVE Department (2004-2006)
Academic Senator (1999-2003)

ACADEMIC EXPERIENCE:**TEACHING**

California Polytechnic State University, San Luis Obispo, Department Chair (7/08 to Present), Professor (9/02 to Present) Associate Professor (9/99 to 8/02), Assistant Professor (9/97 to 8/99)

Teaching undergraduate courses on structural analysis, structural dynamics, strength of materials, and seismic analysis and design. Special emphasis is placed on enhancing students' learning by using hands-on exercises, modern computers, and Internet facilities. Course related material is made available to students

through web pages on the World Wide Web. In particular, students' need to purchase CE407 lab manual has been minimized by putting all the relevant material on the web page.

Syracuse University, Syracuse, Assistant Professor (1/95 to 8/97)

Teaching following graduate and undergraduate courses in structural engineering:

- Reinforced concrete design - Undergraduate
- Advanced reinforced concrete design - Graduate
- Structural Dynamic - Graduate/Undergraduate
- Earthquake Engineering - Graduate
- Structural analysis - Undergraduate

Using interactive teaching tools for enhancing students' physical understanding of concepts in structural engineering. For this purpose, several spreadsheet programs have been developed and are being used in the classroom (with interactive student participation) while theoretical behavior is discussed. These computer models are made available to students through the home page so that they can further their understanding of the subject at their own pace and convenience.

Using Internet and World Wide Web to quickly disseminate information on class conduct as well as links to other sites with relevant information. Additional details are available on the home page (see front page of this curriculum vitae for address).

University of California, Berkeley, Lecturer (Fall Semester 1992)

In-charge of teaching an undergraduate course on Introduction to the Mechanics of Solids. The class consisted of over one hundred students. Responsibilities included independently preparing teaching material; lectures three times a week; advising students; preparing, conducting and grading examinations; and assigning final grade for the course.

University of California, Berkeley, (11/90-12/94)

Assisted Professor Chopra in developing instructional material for courses on Structural Dynamics and Earthquake Engineering including the development of computer algorithms, numerical results, and illustrations. This work has been used at Berkeley Campus for teaching series of Structural Dynamics courses at graduate and undergraduate levels, and has been published as a text book on the same subject.

University of California, Berkeley, Teaching Assistant (1/84-5/85 and 8/86-5/89)

Assisted faculty in teaching graduate and undergraduate courses on Statics, Mechanics of Materials, and Static and Dynamic Structural Analysis. Responsibilities included classroom instructions to graduate and undergraduate students, laboratory work on experimental shaking table, and grading examinations and papers.

RESEARCH

California Polytechnic State University, San Luis Obispo, Associate Professor (9/99 to Present), Assistant Professor (9/97 to 8/99)

Continued research on seismic protection of asymmetric plan buildings using supplemental damping; analysis methods for seismic performance of structures; performance-based seismic engineering of buildings.

Earthquake Engineering Research Center, University of California, Berkeley, Visiting Research Engineer (Summer 1998, 2004, 2005, 2006)

Performance-based seismic engineering of buildings and bridges.

Syracuse University, Syracuse, Assistant Professor (1/95 to 8/97)

Systematically developing techniques for seismic protection of asymmetric plan buildings by using supplemental damping devices. This research involves both analytical and experimental components. The project is focused on developing national guidelines for seismic retrofit of asymmetric-plan buildings, especially those with nonductile lateral load resisting elements and typical of many buildings in the central and eastern United States, by use of various damping devices.

Research in the area of earthquake engineering with emphasis on earthquake analysis and design of asymmetric buildings and bridges.

Earthquake Engineering Research Center, University of California, Berkeley, Assistant Research Engineer/ Visiting Assistant Research Engineer (11/90-12/94)

Investigated earthquake response of US 101/ Painter Street overpass using strong motion records. Extracted in this project are the stiffness values of abutment-soil systems directly from the earthquake records obtained at this structure. Proposed improvements to current industry procedures.

Developed a new procedure for code lateral force analysis of asymmetric-plan buildings without locating centers of rigidity.

Developed an extended dual-level earthquake resistant design approach for asymmetric-plan systems wherein the serviceability and ultimate limit states are considered explicitly. Also developed are the guidelines to modify existing earthquake code provisions to include this new procedure in the design process.

RELATED PROFESSIONAL EXPERIENCE:

INDUSTRY

PMB System Engineering Inc., San Francisco, California, Senior Engineer (6/85-4/86)

Performed dynamic and static analysis (linear and nonlinear) of offshore structures. Responsibilities included using and developing state-of-the-art analysis software.

Investigated stress concentration in steel tubular joints using advanced finite element analysis techniques to evaluate the industry guidelines for stress concentration in the offshore structures. This project involved use of CRAY super-computing facilities for analysis of large finite element problem.

Developed software for stability, transportability, and economic feasibility analysis of reinforced concrete caisson-type Arctic oil exploration structures.

Engineer's India Limited (EIL), New Delhi, Junior Engineer/ Management Trainee (6/82-1/84)

Designed steel and reinforced concrete structures related to oil refineries. Responsibilities included developing design criteria, analysis and design of foundations and structures, preparation and review of fabrication drawings for steel structures.

Independently managed two mid-sized refinery expansion projects.

Supervised construction at a large oil refinery project.

CONSULTING

Prentice-Hall (1999-2007)

Technical consultant on 1st, 2nd, and 3rd editions of *Dynamics of Structures: Theory and Applications to Earthquake Engineering*, by Anil K. Chopra. Developed all illustrations of the book.

K & S Analysis, San Luis Obispo, California (1997-2000)

Seismic Consultant

II. TEACHING RELATED ACTIVITIES

COURSES TAUGHT:

CE 204 – Strength of Materials I

CE 205/207 – Strength of Materials II

CE 456 – Seismic Principles

CE 457 – Bridge Engineering

CE 557 – Seismic Analysis and Design

CE407 – Structural Dynamics

CE351 – Structural Analysis

CE 201 – Strength of Materials

CE353 – Structural Analysis II

CIE635 – Advances RC Design (Graduate Course at Syracuse University)

CIE632 – Earthquake Analysis (Graduate Course at Syracuse University)

CIE538 – Dynamics of Structures (Graduate Course at Syracuse University)
CIE332 – Reinforced Concrete Design (Undergraduate Course at Syracuse University)
CIE331 – Structural Analysis (Undergraduate Course at Syracuse University)
CIE325 – Mechanics of Materials (Undergraduate Course at Syracuse University)
CE130 – Strength of Materials (Undergraduate Course at U. C. Berkeley)

INTRODUCTION OF NEW COURSES:

CE 456 – Seismic Principles
CE557 - Seismic Analysis and Design
CE457- Bridge Engineering
CEE632 - Earthquake Analysis (New Graduate Course at Syracuse University)

REVISION OF EXISTING COURSES:

CE351 – Structural Analysis

This course was offered for the time during Fall 1997 at Cal Poly and combined the contents of two 3-unit courses (CE352 and CE353) into one 5-unit course.

CE201 – Strength of Materials

This course was offered during Fall 1998 for the time at Cal Poly and combined the contents of two 3 and 2 unit courses (CE204 and CE205) into one 5-unit course.

CE461/462 SENIOR PROJECT DIRECTION:

Senior project supervision of five students during 2000-20001 academic year, eight students during 1999-2000 academic year, five students during 1998-1999 academic year, and three student during academic year 1997-1998.

MASTER'S THESIS RESEARCH DIRECTION:

Dillingham, J. "Dynamic Properties of Fire Sprinkler Systems," California Polytechnic State University, San Luis Obispo, May 2002.

Booker, C. A. "Effects of Supplemental Viscous Damping on the Inelastic Seismic Response of Asymmetric Systems," California Polytechnic State University, San Luis Obispo, November 2000

Tam, L. M. "Supplemental Viscous Damping Effects on Seismic Demands of Linear Elastic Systems," California Polytechnic State University, San Luis Obispo, June 2000.

Harasimowicz, A. P. "Seismic Code Analysis of multi-Story Asymmetric Buildings," Syracuse University, May 1997.

DOCTORAL THESIS RESEARCH DIRECTION:

Meng, J. Y. "Seismic Analysis and Design of Skewed and Asymmetric Bridges," Syracuse University.

STUDENT EXAMINATION COMMITTEES:

Master's Thesis, Jamil Awkar, Civil Engineering, Syracuse University, July 1997.

Doctoral Thesis Defense Chair, Vajira Samarasooriya, Electrical and Computer Engineering, Syracuse University, October 1996.

Master's Thesis, Tracy Ward, Civil Engineering, Syracuse University, August 1996.

Master's Thesis, Peter Fariello, Mechanical Engineering, Syracuse University, July 1996.

STUDENT ADVISING:

Academic advisor to approximately 60 CE undergraduate students.

III. PROFESSIONAL GROWTH AND DEVELOPMENT ACTIVITIES

CURRENT RESEARCH PROJECTS:

1. Earthquake Protection of Asymmetric Buildings by Supplemental Damping Devices
2. Analysis Methods for Seismic Performance of Structures
3. Performance-Based Seismic Engineering of Buildings

FUNDED PROJECTS:

1. Development of Enhanced Interpolation Schemes for Accurate Estimation of Engineering Demand Parameters from Recorded Strong-Motion Data of Buildings. Sponsor: Department of Conservation, Strong Motion Instrumentation Plan, State of California, Budget: \$75,270, Status: Funded (June 1, 2008 to December 31, 2009).
2. California State Multi-Hazard Mitigation Plan Revision. PI: Ken Topping and Bill Simbieda, CRP, College of Architecture and Environmental Design, Cal Poly. Sponsor: California Office of Emergency Services. Co-PI: Goel (Consultant on Seismic Issues), Consultant Budget: \$10,000, Status: Funded.
3. Evaluation of Current Nonlinear Static Procedures using Strong-Motion Data Recorded from Five Reinforced Concrete Building. Sponsor: Department of Conservation, Strong Motion Instrumentation Plan, State of California, Budget: \$102,621, Status: Funded (June 1, 2006 to December 31, 2007).
4. LNGTEMS/MOTEMS performance-Based Seismic Criteria. PI. Rakesh Goel, California State Lands Commission, Budget: 43,426, Status: Funded (May 2, 2006 to June 30, 2008).
5. Seismic Safety Evaluation of Portable Wine Barrels. Co-PI: Charles Chadwell. Sponsor: California Central Coast Research Partnership (C3RP), Budget: \$40,000, Status: Funded (April 2004).
6. Evaluation of Nonlinear Static Procedures Using Strong-Motion Building Records. Sponsor: Department of Conservation, Strong Motion Instrumentation Plan, State of California, Budget: \$56,528, Status: Funded (June 2002).
7. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: NSF. Year Three Funding, Budget: \$28,226. Status: Funded (September, 2000).
8. Travel Grant to Participate in 12th World Conference on Earthquake Engineering. Sponsor: Earthquake Engineering Research Institute. Status: Funded for upto \$1,000. January (2000).
9. A Seismic Simulator Facility for ATL. Sponsor: The Ralph M. Foundation. Status: Funded at \$250,000. November (1999).
10. Improving Seismic Performance of Asymmetric Buildings: Plan-wise Distribution of Supplemental Damping. Co-PI: Anil Chopra and Andrew Whittaker, U. C. Berkeley. Sponsor: NSF. Status: Funded at \$122,354. February (1999).
11. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: NSF. Budget: \$20,491. Status: Funded (11/12/1999).
12. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: NSF. Request for 25% Release Time for Fall 1999, Budget: 6,062. Status: Funded (1999).
13. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: NSF. Request for 20% Release Time for Winter and Spring 1999, Budget: 12,880. Status: Funded (1999).
14. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: NSF. Status: Funded at \$333,170, Cal Poly Sub-award at \$61,500. Duration: 3 Years (1998)
15. Document Strengths and Weaknesses in Current Computer Analysis Methods for Seismic Performance. Co-PI: Abe Lynn, Vicki Vance, David Weggel, and Satwant Rihal. Sponsor: PEER Center. Status: Funded at \$20,000. Duration: 1 Year (1998)
16. Travel to Attend 2nd World Conference on Structural Control in Kyoto, Japan, June 28 to July 1, 1998. Co-PI: N/A. Sponsor: Pacific Earthquake Engineering Research (PEER) Center. Status: Funded at \$3,000. Duration: N/A (1998)
17. Improving Earthquake Performance of Asymmetric Buildings. Sponsor: Faculty Development Program, Cal Poly State University. Status: Funded at One-Month Summer Salary. Duration: One Month (1998)

18. Research and Graduate Program Incentive Grant: Improving Seismic Performance of Asymmetric Buildings -- Plan-wise Distribution of Supplemental Viscous Damping. Sponsor: Research and Graduate Program, Cal Poly State University. Status: Funded for 4 WTUs of Faculty Assigned Time. Duration: Winter Quarter (1998)
19. Travel to Attend National Seismic Conference on Bridges and Highways, Sacramento, CA, July 8 to 11, 1997. Co-PI: N/A. Sponsor: Federal Highway Administration. Status: Funded at \$253. Duration: N/A (1997).
20. Development of Interactive Teaching Tools for Structural Analysis. Co-PI: None. Sponsor: Center for Instructional Development, Syracuse University. Status: Funded at \$1,500. Duration: 1 Year (1995)
21. Improvements in Code and Dynamic Analysis of Buildings Using Their Recorded Motions During the Northridge and Other Recent Earthquakes. PI: Anil Chopra, U. C. Berkeley (Contract was awarded to Prof. Chopra). Sponsor: NSF. Duration: 1 Year. (1994).
22. Earthquake Response of Short-freeway Overpass. PI: Anil Chopra, U. C. Berkeley (Contract was awarded to Prof. Chopra). Sponsor: California Strong Motion Instrumentation Program NSF. Duration: 1 Year. (1992).
23. Analysis, Design, and Safety Evaluation of Asymmetric-plan Buildings. PI: Anil Chopra, U. C. Berkeley (Contract was awarded to Prof. Chopra). Sponsor: NSF. Duration: 3 Year. (1990).
24. Ammann Research Fellowship for Supporting Dissertation Work. Co-PI: None. Sponsor: American Society of Civil Engineers. Status: Funded at \$5,000. Duration: 1 Year. (1989).

PROPOSAL UNDER REVIEW:

1. Influence of Skew Angle on Shear load Distribution in Multi-Cell Box-Girder Bridges, Co-PI: N. Mitra, E. Kasper. G. Hall, Sponsor: CALTRANS (2007).

OTHER SUBMITTED PROPOSALS:

1. Collaborative Research: Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Unsymmetric-Plan Buildings. With U. C. Berkeley. Sponsor: National Science Foundation, Cal Poly Request: \$45,559, Duration: 3 Years, October (2006).
2. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Unsymmetric-Plan Buildings. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: National Science Foundation, Cal Poly Request: \$91,814, Duration: 3 Years, December (2005).
3. Seismic Performance of Instrumented Buildings in Epicentral Region of 2004 Parkfield and 2003 San Simeon Earthquakes. California Strong Motion Instrumentation Program, Approximate Budget: \$50,000, Duration: 13 Months, March, 2005.
4. Evaluation of Ground Motion Provisions in Seismic Codes Using Data Recorded During 2004 Parkfield Earthquake. California Strong Motion Instrumentation Program, Approximate Budget: \$50,000, Duration: 13 Months, March, 2005.
5. Development of a Post-Earthquake Safety Evaluation Procedure Using Motions of Buildings Recorded During an Earthquake. National Science Foundation, Total Funds Requested: \$142,101, Duration: 2 Years, December (2004).
6. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Unsymmetric-Plan Buildings. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: National Science Foundation, Total Funds Requested: \$428,420, Cal Poly Request: \$121,618, Duration: 3 Years, December (2003).
7. Seismic Protection of Vulnerable Buildings. Sponsor: California Central Coast Research Partnership, Total Funds Requested: 28,600.
8. Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Unsymmetric-Plan Buildings. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: National Science Foundation, Total Funds Requested: \$476,744, Cal Poly Request: \$120,826, Duration: 3 Years, September (2002).
9. Dynamic Analysis Procedures for Performance-Based Seismic Engineering. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: National Science Foundation, Total Funds Requested: \$365,596, Cal Poly Request: \$81,261, Duration: 3 Years, September (2001).
10. Student Participation in Improving Seismic Performance of Asymmetric Buildings. Sponsor: National Science Foundation, Requested Funds: \$10,000. September (1999).
11. Static Load Tests of Heavy Duty Shoring Frames under Longitudinal and Transverse Loading. Co-PI: E. P. Kasper and A. C. Lynn. Sponsor: Patent Construction Systems, Seattle, WA (1998).

12. Structural and Geotechnical Applications of Polystyrene for Seismic Hazard Mitigation. Co-PI: Eric Kasper, Gregg Fiegel, Jay DeNatale. Sponsor: AFM Corporation (1998)
13. Construction Specifications for Bonded Repair and Retrofit of Concrete Structures Using FRP Composites. P.I. Damian Kachlakev. Sponsor: National Cooperative Research Program, Transportation Research Board. Requested Funds: \$181,377. October (2000).
14. A Seismic Simulator Facility for the Advanced Technology Laboratory. Sponsor: National Science Foundation, Requested Funds: \$2,224,215. May (2000).
15. Capacity-Demand-Diagram Methods for Estimating Seismic Deformation of Older Existing Reinforced Concrete Buildings. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: PEER Center. March (1999)
16. Evaluation of Performance-Based Seismic Codes Using Recorded Motions of Four Steel Frame Buildings. Co-PI: Abe Lynn. Sponsor: California strong Motions Instrumentation Program. February (1999)
17. Dynamic Analyses for Performance-Based Engineering of Buildings. Co-PI: Anil Chopra, U. C. Berkeley. Sponsor: PEER Center (1998)
18. Low Cost Earthquake Protective System for Low-Rise Buildings: Wood-Polystyrene Composite Wall Panel. Co-PI: None. Sponsor: PEER Center (1998)
19. Evaluation of Performance-Based Seismic Codes Using Recorded Motions of Four Code-Instrumented Steel Frame Buildings. Co-PI: Abe Lynn. Sponsor: California strong Motions Instrumentation Program (1998).
20. Improving Earthquake Performance of Asymmetric Buildings. Sponsor: Faculty Development Grant Program, Cal Poly State University (1997).
21. 1997 Data Interpretation Project. PI: Wendy Taniwangsa. Co-PI: Abe Lin. Sponsor: California Strong Motion Instrumentation Program. (1997)
22. Development of A Procedure to Include High Damping in Seismic Analysis of Bridges with Abutment participation. Sponsor: National Center for Earthquake Engineering Research (1997)
23. Evaluation of Simplified Stick Models for Seismic Analysis of Skewed Bridges. Sponsor: National Center for Earthquake Engineering Research. (1997)
24. Earthquake Protection of Asymmetric Buildings By Using Supplemental Damping Devices: An Integrated Research and Education Approach. Sponsor: CAREER Program, NSF. (1996)
25. REU Site (Syracuse University) in Solid Mechanics with Application in Structural, Material, and Geomechanics. PI: Eric Lui. Co-PI: Alan Levy. Investigators: Bhatia, Clemence, Davidson, and Negusse. Sponsor: NSF. (1996)
26. Seismic Analysis and Design of Semi-Rigid Frames. Co-PI: Eric Lui and Xila Liu. Sponsor: NSF (1996)
27. Seismic Analysis, Design, and Evaluation of Skewed and Planwise Asymmetric Highway Bridges. Sponsor: National Center for Earthquake Engineering Research. (1996)
28. Career Development Plan. Sponsor: CAREER Program, NSF (1995)
29. Seismic Response Study of Short Bridge Overcrossings To Investigate Linear And Nonlinear Behavior Of Abutment-Soil Systems. Sponsor: National Center for Earthquake Engineering Research (1995)

PUBLICATIONS:

JOURNAL PAPERS

1. Goel, R.K. (2008). "Simplified Procedure for Seismic Design of Piles with Partial-Moment-Connection to the Deck in Marine Oil Terminals," Submitted for Publication, *Journal of Structural Engineering*, May.
2. Goel, R.K. (2008). "Simplified Seismic Design of Piles in Marine Oil Terminals," Submitted for Publication, *Earthquake Spectra*, May.
3. Goel, R.K. and Chopra, A.K. (2008). "Linear Analysis of Ordinary Bridges Crossing Fault-Rupture Zones." Submitted for Publication, *Journal of Bridge Engineering*, February.
4. Goel, R.K. and Chopra, A.K. (2008). "Nonlinear Analysis of Ordinary Bridges Crossing Fault-Rupture Zones." Submitted for Publication, *Journal of Bridge Engineering*, February.
5. Goel, R.K. and Chopra, A.K. (2008). "Role of Shear Keys in Seismic Behavior of Bridges Crossing Fault-Rupture Zones." *Journal of Bridge Engineering*, 13(4):398-408.

6. Goel, R.K. (2007). "Evaluation of Procedures to Compute Target Displacement in Pushover Analysis," Submitted for Publication, *Earthquake Spectra*, December 19.
7. Goel, R.K. (2007). "Mode-Based Interpolation of Recorded Motions." In Review, *Journal of Structural Engineering*, October 8.
8. Goel, R.K. and Chopra, A. K. (2005). Response to B. Maison's Discussion of "Evaluation of Modal and FEMA Pushover Analyses: SAC Buildings," *Earthquake Spectra*, 21(1), 277-279.
9. Goel, R.K. and Chopra, A.K. (2005). Role of higher-"mode" pushover analyses in seismic analysis of buildings. *Earthquake Spectra*, 21(4): 1027-1041.
10. Goel, R.K. and Chopra, A.K. (2005). "Extension of Modal Pushover Analysis Procedure to Compute Member Forces," *Earthquake Spectra*, 21(1), 125-139.
11. Goel, R.K. (2005). "Evaluation of Modal and FEMA Pushover Procedures Using Strong-Motion Records of Buildings," *Earthquake Spectra*, 21(3): 653-684.
12. Goel, R.K. (2005). "Seismic Response of Linear and Nonlinear Asymmetric Systems with Nonlinear Fluid Viscous Dampers," *Earthquake Engineering and Structural Dynamics*, 34(7):825-846.
13. Hardenbeck, J.L., Boatwright, J., Dreger, D., **Goel, R.**, Graizer, V., Hudnut, K., Ji, C., Jones, L., Langbein, J., Lin, J., Roeloffs, E., Simpson, R., Starks, K., Stein, R., Tinsley, J.C. (2004). "Preliminary Report on the 22 December 2003 M6.5 San Simeon, California, Earthquake," *Seismological Research Letter*, 75(2), 155-172.
14. Goel, R.K., and Chopra, A.K. (2004). "Evaluation of Modal and FEMA Pushover Analyses: SAC Buildings," *Earthquake Spectra*, 20(1), 225-254.
15. Chopra, A.K. and Goel, R. K. (2004). "A Modal Pushover Analysis Procedure to Estimate Seismic Demands for Unsymmetric-Plan Buildings," *Earthquake Engineering and Structural Dynamics*, 33(8), 903-927.
16. Chopra, A.K., Goel, R.K., and Chintanapakdee, C. (2004). "Evaluation of a Modified MPA Procedure Assuming Higher Modes as Elastic to Estimate Seismic Demands," *Earthquake Spectra*, 21(3), 757-778.
17. Chopra, A.K., Goel, R.K., and Chintanapakdee, C. (2003). "Statistics of Single-Degree-of-Freedom Estimate of Displacement for Pushover Analysis of Buildings," *Journal of Structural Engineering*, ASCE, 129(4), 459-463.
18. Chopra, A. K. and Goel, R.K. (2002). "A modal pushover analysis procedure for estimating seismic demands of buildings," *Earthquake Engineering and Structural Dynamics*, 31, 561-582.
19. Goel, R. K. (2001). "Simplified analysis of asymmetric structures with supplemental damping," *Earthquake Engineering and Structural Dynamics*, 30(9), 1399-1416.
20. Chopra, A.K. and Goel, R.K. (2001). "Direct Displacement-Based Design: Use of Inelastic Design Spectra versus Elastic Design Spectra," *Earthquake Spectra*, 17(1), 47-64.
21. Goel, R. K. and Booker, C. A. (2001). "Effects of Supplemental Viscous Damping on Inelastic Seismic Response of Asymmetric Systems," *Earthquake Engineering and Structural Dynamics*, 30(3), 411-430.
22. Chopra, A. K. and Goel, R. K. (2000). "Evaluation of a NSP to Estimate Seismic Deformation: SDF Systems," *Journal of Structural Engineering*, ASCE, 126(4), 482-490.
23. Goel, R. K. (2000). "Seismic Behavior of Asymmetric Buildings with Supplemental Damping," *Earthquake Engineering and Structural Dynamics*, 29(3), 461-480.
24. Chopra, A. K. and Goel, R. K. (2000). "Building Period Formulas for Estimating Seismic Displacements Technical Note, *Earthquake Spectra*, Earthquake Engineering Research Institute, 16(2), 533-536.
25. Chopra, A. K. and Goel, R. K. (1999). "Capacity-Demand Diagram Methods Based on Inelastic Design Spectrum," *Earthquake Spectra*, Earthquake Engineering Research Institute, 15(4), 637-656.
26. Goel, R. K. and Chopra, A. K. (1999). Closure to "Period Formulas for Concrete Shear Wall Buildings," *Journal of Structural Engineering*, ASCE, 125(7), 798-799.
27. Goel, R. K. (1998). Closure to "Seismic Response of Asymmetric Systems: Energy-Based Approach," *Journal of Structural Engineering*, ASCE, 124(11), 1370-1371.
28. Goel, R. K. and Chopra, A. K. (1998). "Period formulas for Concrete Shear Wall Buildings," *Journal of Structural Engineering*, ASCE, 124(4), 426-433.
29. Goel, R. K. (1998). "Effects of Supplemental Viscous Damping on Seismic Response of Asymmetric-Plan systems," *Earthquake Engineering and Structural Dynamics*, 27, 125-141.

30. Harasimowicz, A. P. and Goel, R. K. (1998). "Seismic Code Analysis of Multi-Storey Asymmetric Buildings," *Earthquake Engineering and Structural Dynamics*, 27, 173-185.
31. Goel, R. K. (1997). "Earthquake Characteristics of Bridges with Integral Abutments," *Journal of Structural Engineering*, ASCE, 123(11), 1435-1443.
32. Goel, R. K. (1997). "Seismic Response of Asymmetric Systems: Energy-Based Approach," *Journal of Structural Engineering*, ASCE, 123(11), 1444-1453.
33. Goel, R. K. and Chopra, A. K. (1997). "Period Formulas for Moment Resisting Frame Buildings," *Journal of Structural Engineering*, ASCE, 123(11), 1454-1461.
34. Goel, R. K. and Chopra, A. K. (1997). "Evaluation of Bridge Abutment Capacity and Stiffness During Earthquakes," *Earthquake Spectra*, Earthquake Engineering Research Institute, Oakland, CA, 13(1), 1-23.
35. Goel, R. K. and Chopra, A. K. (1995). Closure to "Seismic Code Analysis of Buildings Without Locating Centers of Rigidity," *Journal of Structural Engineering*, ASCE, (120) 4, 793-794.
36. Goel, R. K. and Chopra, A. K. (1994). "Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings," *Journal of Structural Engineering*, ASCE, 120(1), 161-179.
37. Goel, R. K. and Chopra, A. K. (1993). "Seismic Code Analysis of Buildings Without Locating Centers of Rigidity," *Journal of Structural Engineering*, ASCE, 119(10), 3039-3055.
38. Chopra, A. K. and Goel, R. K. (1991). "Evaluation of Torsional Provisions in Seismic Codes," *Journal of Structural Engineering*, ASCE, 117(12), 3762-3782.
39. Goel, R. K. and Chopra, A. K. (1991). "Effects of Plan-Asymmetry in the Inelastic Seismic Response of One-Story Systems," *Journal of Structural Engineering*, ASCE, 117(5), 1492-1513.
40. Goel, R. K. and Chopra, A. K. (1991). "Inelastic Seismic Response of One-Story, Asymmetric-Plan Systems: Effects of System Parameters and Yielding," *Earthquake Engineering and Structural Dynamics*, 20(3), 201-222.
41. Goel, R. K. and Chopra, A. K. (1990). "Inelastic Seismic Response of One-Story, Asymmetric-Plan Systems: Effects of Stiffness and Strength Distribution," *Earthquake Engineering and Structural Dynamics*, 19(7), 949-970.

INVITED-WORKSHOP PROCEEDINGS

1. Goel, R.K. (2008). "Generalized Pushover Curves for Nonlinear Static Analysis of Three-Dimensional Structures," Proceedings of Nonlinear Static Methods for Design/Assessment of 3D Structures, R. Bento and R. Pinho (Eds), Lisbon, Portugal, 5-6 May.
2. Chopra, A.K., and Goel, R.K. (2004). "Modal Pushover Analysis: Symmetric and Unsymmetric Plan Buildings," Proceedings of International Workshop Performance-Based Seismic Design, P. Fajfar (Eds), Bled, Slovenia, June 28 to July 1.

CONFERENCE PROCEEDINGS

1. Goel R.K. and Chadwell, C. (2007). "Evaluation of ASCE-41 Nonlinear Static Procedure Using Recorded Motions of Reinforced-Concrete Buildings," Proceedings of 2008 Structures Congress, Vancouver, Canada.
2. Goel, R. K. (2007). "Simplified Procedure for Seismic Analysis of Reinforced-Concrete Piles in Marine Oil Terminals," Proceedings of 2008 Structures Congress, Vancouver, Canada.
3. Goel, R.K. and Chopra, A.K. (2007). "Analysis of Bridges Crossing Fault Rupture Zones," Accepted for Publication, 6th National Seismic Conference on Bridges and Highways, Charleston, South Carolina.
4. Mitra, N. and Goel, R.K. (2007). "Uncertainty In Structural Response Associated With High Level Modeling Decisions," Submitted for 14th World Conference on Earthquake Engineering, Beijing, China.
5. Goel, R.K. (2007). "Evaluation of Current Nonlinear Static Procedures for Reinforced-Concrete Buildings," Submitted for 14th World Conference on Earthquake Engineering, Beijing, China.
6. Goel, R.K. and Chopra, A.K. (2007). "Analysis of Bridges Crossing Fault Rupture Zones," Submitted for 14th World Conference on Earthquake Engineering, Beijing, China.
7. Goel R.K. and Chadwell, C. (2007). "Evaluation of Current Nonlinear Static Procedures for Concrete Buildings Using Recorded Strong-Motion Data," *Proceedings, SMIP07 Seminar on Utilization of Strong-Motion Data*, Strong Motion Instrumentation Program, CDMG, Sacramento, CA.

8. Goel, R.K. (2007). "Analysis of Strong Motion Records from Five Reinforced-Concrete Building." Proceedings of 2007 Structures Congress, Long Beach, CA.
9. Goel, R.K. (2007). "Evaluation of Current Nonlinear Static Procedures Using Strong Motion Records." Proceedings of 2007 Structures Congress, Long Beach, CA.
10. Liu, H., Goel, R.K, Bai, F., Scott, W., and Kono, T. (2006). "System Identification, Modeling and Performance Prediction of a 20-Story Office Building." 4th International Conference on Earthquake Engineering, Taipei, Taiwan, October 12 to 13.
11. Goel, R.K. and Chopra, A. K. (2006). "Additional Developments in Modal Pushover Analysis." 8th US National Conference on Earthquake Engineering, Paper No. 185, San Francisco, CA.
12. Goel, R.K. (2006). "Seismic Design Implications of Ground Motion Data Recorded During 2004 Parkfield Earthquake." 8th US National Conference on Earthquake Engineering, Paper No. 152, San Francisco, CA.
13. Liu, H., Goel, R.K., Bai, F., Scott, W., and Kono, T. (2006). "Preliminary Study on a 20-Story Office Building Instrumented by ANSS Program in Anchorage, Alaska." 8th US National Conference on Earthquake Engineering, Paper No. 152, San Francisco, CA.
14. Goel, R.K. (2005). "Masonry Buildings in Seismically Active Regions: Engineering Approach to Risk Reduction." International Symposium on Urban Disaster Risk Reduction and Regeneration Planning, Nov. 3 to 5, California Polytechnic State University, San Luis Obispo, CA.
15. Goel, R.K. and Chopra, A. K. (2005). Estimation of Seismic Demands in Bridges Crossing Fault Rupture Zones. CD-ROM Proceedings of Caltrans Research Workshop, November, Sacramento, CA.
16. Goel, R.K. and Chopra, A.K. (2005). Modal Pushover Analysis for Unsymmetric Buildings. Proceedings of the 2005 Structures Congress, New York, NY.
17. Goel, R.K. (2004). Evaluation of Nonlinear Static Procedures Using Building Strong Motion Records. *Proceedings of 13th World Conference on Earthquake Engineering, Paper No. 3213*, Vancouver, British Columbia.
18. Goel, R.K. (2004). Seismic Response Control of Irregular Structures Using Nonlinear Dampers. *Proceedings of 13th World Conference on Earthquake Engineering, Paper No. 3212*, Vancouver, British Columbia.
19. Goel, R. K. (2004). "Evaluation of Nonlinear Static Procedures Using Strong-Motion Building Records," *Proceedings, SMIP04 Seminar on Utilization of Strong-Motion Data*, Strong Motion Instrumentation Program, CDMG, 61-81, Sacramento, CA.
20. Goel, R.K. (2004). "Evaluation of Modal and FEMA Pushover Analysis Procedures Using Recorded Motions of Two Steel Buildings," Proceedings of the 2004 Structures Congress, Nashville, TN.
21. Goel, R. K. (2003). "Evaluation of Nonlinear Static Procedures Using Strong-Motion Building Records," *Proceedings, SMIP03 Seminar on Utilization of Strong-Motion Data*, Strong Motion Instrumentation Program, CDMG, 127-148, Oakland, CA.
22. Goel, R.K. (2003). "Effects of Damper Non-linearity on Seismic Response of Asymmetric Systems," *CD-ROM Proceedings of 2003 Structures Congress*, ASCE, Seattle, May 29-31, 2003.
23. Chopra, A. K., and Goel, R.K. (2003). "A Modal Pushover Analysis Procedure to Estimate Seismic Demands of Buildings," *Proceedings of 5th National Conference on Earthquake Engineering*, Istanbul, Turkey, May 26-30.
24. Chopra, A.K., and Goel, R.K. (2002). "Evaluation of Modal Pushover Analysis: SAC Buildings Excluding Gravity Loads," *CD-ROM Proceedings of 2002 Structures Congress*, ASCE, Denver, March 3-6, 2002.
25. Chopra, A. K., and Goel, R. K. (2002). Modal Pushover Analysis Procedure for Seismic Evaluation of Buildings, *Proc.*, 12th European Conf. Earthq. Engrg., London.
26. Goel, R. K. (2001). "Improving Seismic Performance of Asymmetric Buildings with Viscous Dampers," CDROM Proceedings of the 7th US National Conference on Earthquake Engineering, Boston, July 21-25, 2002.
27. Chopra, A. K. and Goel, R. K. (2001). "Dynamic Analysis Procedures for Performance-Based Seismic Engineering of Buildings in Urban Areas," Presented at the 3rd US-Japan Workshop on Performance-Based Engineering, Seattle.
28. Chopra, A. K. and Goel, R. K. (2001). "Modal Pushover Analysis of SAC Buildings," Presented at the US-Japan Workshop, Seattle.
29. Chopra, A. K., and Goel, R. K. (2001). Modal Pushover Analysis of SAC Buildings, *Proc.*, Structural Engineers Association of California Convention, San Diego, Calif.

30. Goel, R. K. and Chopra, A. K. (2000). "Direct Displacement –Based Design Using Inelastic Design Spectrum," Presented at the 2nd US-Japan Workshop on Performance-Based Engineering for Reinforced Concrete Building Structures, Sapporo, Hokkaido, Japan, September 11-13.
31. Goel, R. K. (2000). "Control of Earthquake Induced Vibrations in Asymmetric Buildings Using Passive Damping," *CD-ROM Proceedings of 2000 Structures Congress*, ASCE, Philadelphia, May 8-10, 2000.
32. Chopra, A. K. and Goel, R. K. (2000). "Application of Inelastic Design Spectrum to Capacity-Demand-Diagram Methods," *CD-ROM Proceedings of 2000 Structures Congress*, ASCE, Philadelphia, May 8-10, 2000.
33. Chopra, A. K. and Goel, R. K. (2000). "Application of Inelastic Design Spectrum to Capacity-Demand-Diagram Methods," *Proceedings of the Symposium Honoring Alfredo H-S. Ang*, Philadelphia.
34. Chopra, A. K. and Goel, R. K. (2000). "Dynamic Analysis Procedures for Performance-Based Design," Presented at the JTCC Grantees Meeting, Berkeley, March 22.
35. Goel, R. K. (2000). "Passive Control of Earthquake-Induced Vibrations in Asymmetric Buildings," *CD-ROM Proceedings of 12th World Conference on Earthquake Engineering*, Auckland, New Zealand, January 30 to February 4, 2000.
36. Chopra, A. K. and Goel, R. K. (2000). "Capacity-Demand Diagram Methods Based on Inelastic Design Spectrum," *CD-ROM Proceedings of 12th World Conference on Earthquake Engineering*, Auckland, New Zealand, January 30 to February 4, 2000.
37. Goel, R. K., Lynn, A. C., May, V. L., Rihal, S. S., and Weggel, D. C. (2000). "Evaluating Current Procedures and Modeling for Seismic Performance of Reinforced Concrete Buildings," *CD-ROM Proceedings of 12th World Conference on Earthquake Engineering*, Auckland, New Zealand, January 30 to February 4, 2000.
38. Chopra, A. K. and Goel, R. K. (1999). "Capacity-Demand Diagram Methods Based on Inelastic Design Spectrum," Presented at the *PEER Workshop*, Hawaii, September 2.
39. Goel, R. K. (1999). "Seismic Control of Asymmetric Structures," *Proceedings of Structures Congress*, ASCE, New Orleans, April 18-21, 1999.
40. Chopra, A. K., Goel, R. K., and De la Llera, J. C. (1998). "Seismic Code Improvements Based on Recorded Motions of Buildings During Earthquakes," *Proceedings of SMIP98*, Department of Conservation, Division of Mines and Geology, Strong Motion Instrumentation Program, Sacramento, CA, September.
41. Goel, R. K. (1998). "Control of Earthquake-Induced Torsional Vibrations in Asymmetric Buildings," *Proceedings of 2nd World Conference on Structural Control*, Kyoto, Japan, June 28- July 1, Vol. 2, pp. 1623-1630.
42. Goel, R. K. (1998). "Effects of Supplemental Damping on Earthquake response of Asymmetric Buildings," *CD-ROM Proceedings of Sixth U.S. National Conference on Earthquake Engineering*, Seattle, May 31-June 4.
43. Goel, R. K., and Chopra, A. K. (1998). "Improved Formulas for Fundamental Period of Shear Wall Buildings," *CD-ROM Proceedings of Sixth U.S. National Conference on Earthquake Engineering*, Seattle, May 31-June 4.
44. Goel, R. K. and Chopra, A. K. (1997). "Improvements in Code Design of Buildings Using Motions recorded During Earthquakes," *Proceedings of 1997 Northridge Earthquake Research Conference*, Los Angeles, Aug. 20-22.
45. Goel, R. K. (1997). "Earthquake Behavior of Bridges with Integral Abutments," *Proceedings of the National Seismic Conference on Bridges and Highways: Progress in Research and Practice*, Federal Highway Administration and California Department of Transportation, Sacramento, CA, July 8-11, 149-159.
46. Goel, R. K. (1997). "Energy Based Approach to Earthquake Response of Asymmetric Systems", *Buildings to Last: Proceedings of Structures Congress XV*, ASCE, Portland, Vol. 2, 1158-1162.
47. Goel, R. K. and Chopra A. K. (1997). "Evaluation of Code Period Formula for Concrete MRF Buildings," *Buildings to Last: Proceedings of Structures Congress XV*, ASCE, Portland, Vol. 2, 1337-1341.
48. Goel, R. K. (1996). "Bridge Abutment Stiffness During Earthquakes," *Proceedings of 11th World Conference on Earthquake Engineering*, Acapulco, Mexico, June 23-28, CDROM Paper No. 1315.
49. Goel R. K. and Chopra, A. K. (1996). "Evaluation of Code Formulas for Fundamental Period of Buildings," *Proceedings of 11th World Conference on Earthquake Engineering*, Acapulco, Mexico, June 23-28, CDROM Paper No. 1127.
50. Goel, R. K. (1996). "Capacity and Stiffness of Bridge Abutments During Earthquakes," *Natural Disaster Reduction: Proceedings of the Conference Sponsored by the American Society of Civil Engineers*, George Housner and Riley M. Chung (Editors), ASCE, 239-240. Washington, DC, December.

51. Goel, R. K. (1996). "Evaluation of Bridge Abutment Stiffness During Earthquakes," *Proceedings of the Fourth National Workshop on Bridge Research in Progress*, National Center for Earthquake Engineering Research, State University of New York, Buffalo, June 17-19, 77-82.
52. Goel, R. K. and Chopra, A. K. (1995). "Evaluation of Abutment Stiffness in a Short Bridge Overcrossing During Strong Ground Shaking," *Proceedings of 4th U.S. Conference on Lifeline Earthquake Engineering*, San Francisco, California, August, 509-516.
53. Goel R. K. (1995). "Implementation of NBCC Torsional Provisions for Buildings Without Locating Centers of Stiffness," *Proceedings of 7th Canadian Conference on Earthquake Engineering*, Montreal, Quebec, June, 309-316.
54. Goel, R. K. and Chopra, A. K. (1994). "Extended Dual-Level Approach for Earthquake Resistant Design of Asymmetric-Plan Buildings," *Proceedings of Fifth U.S. National Conference on Earthquake Engineering*, Chicago, Vol. 2, 253-262.
55. Goel, R. K. and Chopra, A. K. (1994). "Seismic Response Study of US 101/ Painter Street Overpass in Rio Dell Using Recorded Motions," *Proceedings of SMIP94*, Department of Conservation, Division of Mines and Geology, Strong Motion Instrumentation Program, Sacramento, CA, May, 75-88.
56. Goel, R. K. and Chopra, A. K. (1993). "Evaluation of US Seismic Code Provisions for Asymmetric-Plan Systems," *Proceedings of the ASCE Structures Congress 93*, Irvine, California, Vol. 1, Apr, 217-222.
57. Goel, R. K. and Chopra, A. K. (1992). "Evaluation of Seismic Code Provisions for Asymmetric-Plan Systems," *Proceedings of the Tenth World Conference on Earthquake Engineering*, Madrid, Spain, Vol. 10, Jul., 5735-5740.
58. Goel, R. K. and Chopra, A. K. (1990). "Some Aspects of Inelastic Earthquake Response of One-Story Asymmetric Plan Systems," *Proceedings of Fourth U.S. National Conference on Earthquake Engineering*, Palm Springs, California, May 20-24, Vol. 2, 259-268.

REPORTS

1. Goel R.K. (2008). "Simplified procedures for seismic analysis and design of piers and wharves in marine oil and LNG terminals," Draft Report No. CP/SEAM-08/01, California Polytechnic State University, San Luis Obispo, CA.
2. Goel, R.K. and Chopra, A.K. (2008). Analysis of Ordinary Bridges Crossing Fault-Rupture Zones. *Report No. UCB/EERC-2008/01*, Earthquake Engineering Research Center, University of California, Berkeley, CA.
3. Goel, R.K. and Chadwell, C. (2007). Evaluation of Current Nonlinear Static Procedures for Concrete Buildings Using Recorded Strong-Motion Data, Draft Final Report, Strong Motion Instrumentation Program, CDMG, Sacramento, CA.
4. Chopra, A.K. and Goel, R. K. (2003). *A Modal Pushover Analysis Procedure to Estimate Seismic Demands for Unsymmetric-Plan Buildings: Theory and Preliminary Evaluation*, Report No. UCB/EERC 2003-08, Earthquake Engineering Research Center, University of California, Berkeley, California, October.
5. Goel, R.K. (2003). *Evaluation of Nonlinear Static Procedures Using Strong-Motion Records of Buildings*, Draft Final Report, Strong Motion Instrumentation Program, CDMG, Sacramento, CA.
6. Goel, R.K. (2002). *Seismic Response Study of Asymmetric Systems with Linear and Nonlinear Fluid Viscous Dampers*, Report No. CP/SEAM-2002/06, Structural Engineering and Applied Mechanics, Department of Civil & Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA, December.
7. Dillingham, J. S., and Goel, R.K. (2002). *Dynamic Properties of Fire Sprinkler Systems*, Report No. CP/SEAM-2002/04, Structural Engineering and Applied Mechanics, Department of Civil & Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA, May.
8. Chopra, A.K., Goel, R.K., and Chintanapakdee, C. (2001). Statistics of SDF-System Estimate of Roof Displacement for Pushover Analysis of Buildings, *Report No. PEER 2001/16*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, December 2001.
9. Chopra, A.K. and Goel, R.K. (2001). A Modal Pushover Analysis Procedure to Estimate Seismic Demands for Buildings: Theory and Preliminary Evaluation, *Report No. PEER 2001/03*, Pacific Earthquake Engineering Research Center, University of California, Berkeley, January 2001, 89 pp.
10. Goel, R. K. and Chopra, A. K. (2001). *A Modal Pushover Analysis Procedure to Estimate Seismic Demands for Buildings*. Report No. PEER 2001/03, Pacific Earthquake Engineering Research Center, Richmond, CA, January.

11. Booker, C. A. and Goel, R. K. (2000). *Effects of Supplemental Viscous Damping on Inelastic Seismic Response of Asymmetric Systems*. Report No. CP/SEAM-2000/02, Structural Engineering and Applied Mechanics, Department of Civil & Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA, November.
12. Tam, L. M. and Goel, R. K. (2000). *Supplemental Viscous Damping Effects on Seismic Demands of Linear Elastic Systems*. Report No. CP/SEAM-2000/01, Structural Engineering and Applied Mechanics, Department of Civil & Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA, June.
13. Chopra, A. K. and Goel, R. K. (1999). *Capacity-Demand-Diagram Methods for Estimating Seismic Deformation of Inelastic Structures: SDF Systems*. Report No. PEER-1999/02, Pacific Earthquake Engineering Research Center, Richmond, CA, April.
14. Goel, R. K. and Chopra, A. K. (1998). "Vibration Properties of Buildings Determined from Recorded Earthquake Motions," *Report No. UCB/EERC-97/14*, Earthquake Engineering Research Center, University of California, Berkeley, California, Dec.
15. Goel, R. K. and Chopra, A. K. (1995). "Seismic Response Study of the HWY 101/ Painter Street Overpass Near Eureka Using Strong-Motion Records," *Data Utilization Report CSMIP/95-01*, California Strong Motion Instrumentation Program, Department of Conservation, Division of Mines and Geology, Sacramento, CA, March.
16. Goel, R. K. and Chopra, A. K. (1990). "Inelastic Seismic Response of One-Story, Asymmetric-Plan Systems," *Report No. UCB/EERC-90/14*, Earthquake Engineering Research Center, University of California, Berkeley, California, Oct.
17. Moehle, J. P. (Editor). (1994). "Preliminary Report on the Seismological and Engineering Aspects of the January 17, 1994 Northridge Earthquake," Contributing Author to Chapter 5, *Report No. UCB/EERC-94/01*, Earthquake Engineering Research Center, University of California, Berkeley, California, Jan.
18. Goel, R. K. (1988). "Simplified Procedures for Elastic Earthquake Analysis of A Class of Torsionally-Coupled Buildings," *CE 299 Report*, Department of Civil Engineering, University of California, Berkeley, California, Feb.

OTHERS

1. ____ (2005). Preliminary Observations: San Simeon California, Earthquake December 22, 2003, Contributing Author to Chapter 3, Earthquake Engineering Research Institute, Oakland California.
2. Goel, R.K. and Chadwell, C. B. (2004). Preliminary report on September 28, 2004 Parkfield earthquake, http://www.eeri.org/lfe/pdf/usa_parkfield_goel.pdf, Earthquake Engineering Research Institute, Oakland, CA.
3. Goel, R. K. (2003). *Preliminary Report on December 22, 2003 San Simeon Earthquake*, http://www.eeri.org/lfe/pdf/usa_san_simeon_prelim_goel.pdf, Earthquake Engineering Research Institute, Oakland, CA.
4. ____ (2002). Bhuj, India Earthquake of January 26, 2001 Reconnaissance Report, Contributing Author to Chapter 10, Supplement A to Volume 18, *Earthquake Spectra*, Earthquake Engineering Research Institute, Oakland California.
5. Goel, R. K. (2001). *A Quick Report on January 26, 2001 Earthquake in INDIA*, January.
6. Goel, R. K. (2001). "Performance of Buildings during the January 26, 2001 Bhuj Earthquake," Abstract Report Submitted to Earthquake Engineering Research Institute, February.
7. Goel, R. K. (2001). "Performance of Buildings in Ahmedabad," Draft Chapter Submitted to Earthquake Engineering Research Institute, May.
8. Goel, R. K. and Chopra, A. K. (1999). "Proposal for Change to NEHRP Provisions: Natural Torsion," Building Seismic Safety Council of California, June.
9. Goel, R. K. and Chopra, A. K. (1995). "Seismic Response Study of US 101/Painter Street Overpass Using Strong Motion Records," *NEWS*, Earthquake Engineering Research Center, University of California, Berkeley, Jan.
10. Goel, R. K. and Whittler, A. S. (1993). "September 29, 1993 Earthquake of India," *News Brief*, Earthquake Engineering Research Center, University of California, Berkeley, California, Oct.
11. Goel, R. K. and Chopra, A. K. (1991). "Inelastic Seismic Response of One-Story, Asymmetric Systems," *NEWS*, Earthquake Engineering Research Center, University of California, Berkeley, Vol. 12, No. 2, July.

CONFERENCES/WORKSHOPS ATTENDED:

1. Nonlinear Static Methods for Design/Assessment of 3D Structures, Invited Workshop, Lisbon, Portugal, 5-6 May, 2008.
2. Structures Congress, Vancouver, B.C., Canada, 2008.
3. Structures Congress, Long Beach, CA, 2007.
4. 8th US National Conference on Earthquake Engineering, 2006.
5. Structures Congress, Saint Louis, 2006.
6. Structures Congress, New York, 2005.
7. 13th World Conference on Earthquake Engineering, Vancouver, B.C., 2004.
8. Structures Congress, Nashville, TN, 2004.
9. Hazardous Buildings Forum, California Specialized Training Institute, San Luis Obispo, CA, March 12, 2004.
10. SMIP04 Seminar on Utilization of Strong-Motion Data, Sacramento, CA, 2004.
11. Structures Congress, Seattle, WA, May 29-31, 2003.
12. SMIP03 Seminar on Utilization of Strong-Motion Data, Oakland, CA, May 22, 2003.
13. 7th U.S. National Conference on Earthquake Engineering, Boston, MA, July 21-25, 2002.
14. UC Berkeley –CUREE Symposium in Honor of Professors Ray Clough and Joseph Penzien, Berkeley, CA, May 9-11, 2002.
15. NEES Consortium Development Regional Workshop, San Jose, CA, April 2, 2002.
16. Structures Congress, Denver, CO, April 4-6, 2002.
17. Structures Congress, Washington, DC, May 21-23, 2001.
18. 2nd US-Japan Workshop on Performance-Based Engineering for Reinforced Concrete Building Structures, Sapporo, Hokkaido, Japan, September 11-13, 2000.
19. Disaster Recovery and Disaster Mitigation Workshop, Cal Poly, September 6-8, 2000.
20. Structures Congress, ASCE, Philadelphia, May 8-10, 2000.
21. JTCC Grantees Meeting, National Science Foundation, Berkeley, March 22, 2000.
22. 12th World Conference on Earthquake Engineering, Auckland, New Zealand, January 30 to February 5, 2000.
23. Ninth Annual Structural Forum, San Luis Obispo, February 20, 1999.
24. Structures Congress, ASCE, New Orleans, April 19-21, 1999.
25. Structural Engineering World Congress (Committee Meetings only), San Francisco, July 19 to 23, 1998.
26. 2nd World Conference on Structural Control, Kyoto, Japan, June 28-July 1, 1998.
27. 6th US National Conference on Earthquake Engineering, Seattle, May 31, June 4, 1998
28. Connector Workshop, Simpson Strong-Tie Connectors, San Luis Obispo, May 1, 1998.
29. Northridge Earthquake Research Conference, Los Angeles, August 20-22, 1997.
30. National Seismic Conference on Bridges and Highways, Sacramento, July 8 to 11, 1997.
31. Structures Congress XV, ASCE, Portland, April 13-16, 1997.
32. 11th World Conference on Earthquake Engineering, Acapulco, Mexico, June 23-28, 1996.
33. Fourth National Workshop on Bridge Research in Progress, National Center for Earthquake Engineering Research, State University of New York, Buffalo, June 17-19, 1996.
34. Structures Congress XIII, ASCE, Boston, April 3-5, 1995.
35. 4th U.S. Conference on Lifeline Earthquake Engineering, San Francisco, California, August 10-12, 1995

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36. 7th Canadian Conference on Earthquake Engineering, Montreal, Quebec, June 3-7, 1995.
 37. 5th US National Conference on Earthquake Engineering, Chicago, July 10-14, 1994.
 38. SMIP94, Seminar on Seismological and Engineering Implications of Recent Strong-Motion Data, Department of Conservation, Division of Mines and Geology, Strong Motion Instrumentation Program, Los Angeles, May 26, 1994.
 39. Structures Congress XI, Irvine, California, April 19-21, 1993.
 40. Fourth U.S. National Conference on Earthquake Engineering, Palm Springs, California, May 20-24, 1990.
 41. 8th World Conference on Earthquake Engineering, San Francisco, California, July 21-28, 1984.

INVITED LECTURES AND SEMINARS:

1. Implications of 2004 Parkfield Earthquake, Presented at 4th SINUG Conference, Diablo Canyon Power Plant, July 25, 2005.
2. December 22, 2003 San Simeon Earthquake, Presented to Central Coast Geological Society, March 9, 2004.
3. Seismic Retrofit of Unreinforced Masonry Buildings, Presented at Hazardous Buildings Forum, California Specialized Training Institute, San Luis Obispo, CA, March 12.
4. December 22, 2003 San Simeon Earthquake, Presented to Chi-Epsilon, Cal Poly San Luis Obispo, January 27, 2004.
5. Structural Applications of Recorded Motions at Nuclear Power Facilities During Earthquakes, Presented at the Seismic Instrumentation Group Meeting, Diablo Canyon Nuclear Power Plant, July 16, 2001.
6. Performance of Buildings during the January 26, 2001 Bhuj Earthquake in India, April 3 in San Francisco, and April 4 in Los Angeles, 2001.
7. Shaking in the Land of Gandhi: Engineering Implications of January 26, 2001 Bhuj (India) Earthquake, California Polytechnic State University, San Luis Obispo, CA, May, 2001.
8. Recent Research on Seismic Control of Structures Using Supplemental Damping at Cal Poly, CEENVE Graduate Seminar, Cal Poly, October 10, 2000.
9. Recent Research in Earthquake Engineering at Cal Poly, CEENVE Graduate Seminar, Cal Poly, October 4, 1999.
10. Simplified Methods to Estimate Deformation for Performance-Based Seismic Engineering, Indian Institute of Technology, Kanpur, August 4 to 6, 1999.
11. Control of Earthquake Induced Vibrations, CEENVE Graduate Seminar, Cal Poly, October 12, 1998.
12. Improvements in Code Analysis of Buildings Using Motions Recorded During Earthquakes, Cornell University, Ithaca, NY, June 20, 1997.
13. Fundamental Periods of Buildings During Earthquakes, Indian Institute of Technology, Bombay, India, January 7, 1997; Indian Institute of Technology, Kanpur, India, January 5, 1997; and Roorkee University, India, December 23, 1996.
14. Code Analysis of Asymmetric Buildings Without Locating Centers of Rigidity, Indian Institute of Technology, Delhi, India; and Indian Institute of Technology, Kanpur, India.
15. Inelastic Earthquake Response of Asymmetric Buildings, Structural Engineering Mechanics and Materials Seminar Series, Department of Civil Engineering, University of California, Berkeley.
16. Simplified Procedures for Elastic earthquake Analysis of Asymmetric Buildings, Indian Institute of Technology, Kanpur.

PEER REVIEW AND EDITORIAL ACTIVITIES:

Associate Editor, Journal of Structural Engineering, American Society of Civil Engineers, December 2003-Present.

Peer Reviewer, National Science Foundation, PATH Initiative (12 Proposals: Number not provided to protect NSF confidentiality)

Peer Reviewer, Earthquake Spectra (3 Manuscripts, Chong & Soong, Motlagh & Saadeghvaziri, Xue).

Peer Reviewer, Proposals to the National Science Foundation (3 Proposals: Number not provided to protect NSF confidentiality)

Peer Reviewer, ASCE Journal of Structural Engineering (21 Manuscripts: 20971-ST (Revised) 20971-ST, 016759-ST, 016012-ST, 015537-ST, 015538-ST, 015283-ST, 015284-ST, 010065-ST, 009711-ST, ST10518, ST10449, 007994-ST, ST6123, ST7333, ST4934, ST4934R, Hahn & Liu, ST6123, 002333ST, 003037ST, ST/1999/022134)

Peer Reviewer, ASCE Journal of Engineering Mechanics (1 Manuscript: Wong & Rong).

Peer reviewer, ISET Journal of Earthquake technology (1 Manuscript: ISET/Special/98/3).

Peer Reviewer, International Journal of Earthquake Engineering and Structural Dynamics (10 Manuscripts: 9531-R, 9708, 9531, 9359, W459, 9326, 9326R, 9165, 9165R, 9513R)

Peer Reviewer, Earthquake Spectra (1 Manuscript: Arista & Gomez)

Peer Reviewer, Canadian Journal of Civil Engineering (1 Manuscripts: 5289)

Peer Reviewer, 11th World Conference on Earthquake Engineering, Acapulco, Mexico (20 Abstracts),

Peer Reviewer, NCEER Technical Reports, National Center for Earthquake Engineering Research, Buffalo, NY (1 Manuscript: Douglas et. al.)

ACTIVITIES IN PROFESSIONAL SOCIETIES:

Session Chair: 2007 Structures Congress.

Session Chair: Panel Discussion on Threats and Vulnerabilities, International Symposium on Urban Disaster Risk and Regeneration Planning, Cal Poly, San Luis Obispo, November 2005.

Session Chair: 8th US National Conference on Earthquake Engineering, San Francisco, CA

Session Chair – 2nd US Japan Workshop on Performance Based Engineering of R/C Structures, Sapporo, Japan.

Session Chair – 2000 ASCE Structures Congress in Philadelphia: Performance Based Seismic Engineering.

Session Chair – 1999 ASCE Structures Congress in New Orleans: Recent Advances on the Torsional Effects of Structures

Session Chair – 2nd World Conference on Structural Control: Seismic Response Control

Session Chair – 1997 ASCE Structures Congress in Portland: (1) Torsional Response of Structures, and (2) Interpretation of Nonlinear Analysis Results for Design Applications

Active Member in following ASCE Committees

- Subcommittee on Emerging Methods of Analysis in Earthquake Engineering, Chair, (2007-Present)
- Tall Buildings (1997-2000)
- Structural Control Committee (1999-Present)
- Seismic Effects Committee (1994-2000, 2003-Present)
- Subcommittee on Seismic Performance of Bridges (1995-1996)
- Method of Analysis (1993 to 2001)

MEMBERSHIPS:

American Society of Civil Engineers (ASCE), Fellow
Earthquake Engineering Research Institute (EERI)

HONORS AND AWARDS:

Northrop Grumman Research and Development Award, 2002, College of Engineering, Cal Poly, SLO.

Professor of the Year, 2002, Society of Hispanic Professional Engineers, Cal Poly, SLO.

Norman Medal, American Society of Civil Engineers, 2001.

Huber Research Prize, American Society of Civil Engineers, 2000.

Who's Who in America, Marquis, 2001.

Who's Who Among America's Teachers, 2000.

Cal Poly Plan Faculty, 1999-2000.

Ammann Research Fellowship in Structural Engineering, 1989, ASCE

Popert Fellowship, 1988-89 and 1989-90, U.C. Berkeley

Genevieve Lichtig Fellowship, 1984, U.C. Berkeley

Malhotra Award for Outstanding Student Leadership Qualities, 1979, I.I.T. Delhi

Merit Award (twice) for Securing 1st Position in Class, 1980 and 8 1, I.I.T. Delhi

IV. SERVICE

UNIVERSITY LEVEL, CAL POLY:

Academic Senate (1999-2003)

Conflict of Interest Review Committee (2001-Present)

Foundation Overview Committee (2001-Present)

COLLEGE LEVEL, CAL POLY:

Chair, Task Force on Workload Relief for Faculty Engaged in Scholarly Activities (2006).

Computer Advisory Committee (2001-2003)

ATL Ad Hoc Committee

I am involved in developing Earthquake Engineering Laboratory in the new ATL building. I am working with Associate Dean Dan Walsh and other colleagues in developing design specifications for the laboratory facility, to pursue outside support for the Seismic Simulator and other equipment for the laboratory.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING, CAL POLY:

Graduate Studies Committee (1998-1999)

Long Range Planning Committee (1997-99)

Computer Ad Hoc Committee (1997-98)

DEPARTMENT OF CIVIL ENGINEERING, SYRACUSE UNIVERSITY:

Promotions Committee (1996-97)

Computer Committee (1996-97)

COLLEGE OF ENGINEERING, SYRACUSE UNIVERSITY:

Academic Affairs Committee (1996-97)

Doctoral Prize Review Committee (May 1996)