SANJEEV PRAJAPATI

Nationality: Nepali

Qualification:

All the following degrees were taught in English and involved written and oral examinations in the same language.

PhD Candidate in Structural Engineering (2011-Present)

Sapienza University, Rome, Italy

3rd year

Master in Earthquake Engineering (2005-2008)

Khwopa Engineering College, Bhaktapur, Nepal

Secured CGPA 3.88 out of 4 (Rank: 1/12)

Bachelor in Civil Engineering (2001-2005)

Khwopa Engineering College, Bhaktapur, Nepal

Secured CGPA 3.50 out of 4 (Rank: 2/48)
Bachelor in Science (Physics) (2000-2003)

Tri- Chandra College, Ghantaghar, Kathamandu, Nepal

Professional Experience:

December, 2008 - 2011, HOD

Khwopa College of Engineering, Bhaktapur, Nepal

Head of Civil Engineering Department

December, 2005 - 2008, Lecturer

Khwopa Engineering College, Bhaktapur, Nepal

Responsible for giving Instruction on theory and laboratory

works in various civil engineering subjects especially Structural Engineering

December, 2005 - 2011, Engineer (as part time)

Structural Analysis and Design of Control Building for Nepal Electricity

Authority constructed at Unichour, Slyantar and Chaughada

Structural Analysis and Design of Office Building constructed at Kalanki.

Structural Analysis and Design of Residential Building constructed at Dhapasi

Supervision, Valuation, Estimation and Drawing of Residential Building.

October, 2007 -- Survey Instructor

Survey Camp 2064 at Urban Development Training Centre (UDTC),

Pokhara

October, 2008 -- Camp Coordinator

Survey Camp 2065 at Teacher Training Centre (TTC), Dhulikhel

Scholarship and Award:

By international competition, I won a scholarship within the European Commission funded project EU-NICE - Erasmus Mundus Action 2 programmes from 01/12/2011 to 01/06/2014 to complete a 30 month exchange doctoral program.

Projects and Thesis:

1. PhD Thesis on: "Out of Plane Response of a Vertical Spanning Unreinforced Masonry Strip Wall Restrained by a Flexible Diaphragm under Earthquake Load"

The relevant literature, both analytical and experimental, has been reviewed. The kinematics and dynamics of rigid bodies have been studied. The modelling considers walls with finite thickness restrained by flexible diaphragms, represented as spring attached on top. The equations of motions considering two degrees of freedom have been derived by using Lagrange's approach. Closed-form steps have carried out in Mathematica and presented using LaTeX.

The energy is damped only when an impact occurs. The main hypothesis is that one impact can occur at a specific snapshot, either with the base or between the blocks. However, as a consequence of a base impact, the intermediate crack may open.

So far only free-vibrations are implemented in a Matlab code, to solve a system of coupled non-linear differential equations. These have compared against existing data.

- 2. Master Degree Thesis on "Seismic Performance Assessment of RC Residential Buildings Design by Mandatory Rule of Thumb"
- 3. Bachelor Degree Project on "Structural Analysis and Design of Office Building."

Professional Memberships:

Nepal Engineering Council, Nepal (Membership No. 4390 'A') Nepal Engineering Association, Nepal (Membership No. 7267)

Presentation:

January, 2013 -- "Out of Plane Behavior of a Vertical Spanning Unreinforced Masonry Strip Wall Restrained by a Flexible Diaphragm" Sapienza University of Rome, Italy

December, 2007 – "Seismic Performance Assessment of RC Residential Buildings Design By Mandatory Rule of Thumb"

One day seminar on Earthquake Safety day at Khwopa Engineering College

December, 2007 - "Earthquake and Nepal"

Two days earthquake safety awareness Program in Chwadi S School, Bhimsen S School and Suvoniyor S. School at Nuwakot District.

Conference:

November, 2006 – International Symposium on "Geo-Disaster, Infrastructure Management and Protection of World Heritage Sites" at Hyatt Regency Hotel

April, 2007 -- 10th National Convention of Engineers "Building a New Nepal, Challenges & Opportunities for Engineers" at BICC

November, **2007** -- Second National Seminar on Rural Bridges: "Connecting Rural Nepal" at Narayani Hotel

17 April 2012 - "Recent Trends in Experimental and Numerical Analysis of Masonry Structures" at Roma Tre

13-15 June 2012 – "6th International Conference on FRP Composites in Civil Engineering", Rome

24-25 May 2012 -- "OpenSees Days, Modeling, Calculation and Analysis of Structures in Earthquake Areas", Rome

18 February 2013 - "Author Workshop", organized by Springer, Dipartimento di Ingegneria informatica, automatica e gestionale (DIAG), Rome,

Seminars:

17 February 2012 -- "Numerical modeling of the seismic behavior of adobe buildings" by Nicola Tarque Ruiz

15 May 2012 -- "Complexities associated with the seismic assessment of unreinforced masonry buildings" by Jason Ingham,

17 July 2012 - "Anisotropic Critical State Theory Fabric Effects" by Yannis F. Dafalias,

11 October 2012 -- "The East Japan Earthquake and Tsunami Disasters" by Yukio Tamura

18 October 2012 -- "Stability Threshold in Non Linear Material Behaviour" by Stuart Santman

14 December 2012 -- "Rocking of Structures During Earthquakes: from Historic Buildings to Modern Design" by Prof. M. DeJong in Università degli Studi Roma Tre,

4 July 2013 -- 'Simulation of Structural Collapse under a Column Removal Scenario', presented by Prof. Sashi Kunnath in Università degli Studi Roma Tre,

Advanced Courses:

Attended the courses offered to Master degree of EU-NICE "Basis of Probability", G. Monti, 24 hours.

"Seismic Demand Characterization", F. Mollaioli, 6 hours

Major subjects in Bachelor Degree:

Theory of Structures, Steel and Concrete Structures, Transportation Engineering, Strength of Materials, Irrigation and Hydropower Engineering. Finite Element Method, Earthquake Engineering, Construction Management and Project Management etc.

Computer Skill:

Programming: Matlab R2011B, Mathematica 8, LaTeX (WinEdit 8), C, C++,

Structural design softwares: SAP 2000 Drawing software: AUTOCAD 2000

GIS software: Arc view 9

Activities:

Survey Camp

Topographic Survey of UDTC, Pokhara Road Design at Rohate VDC, Hemja Field Trips On

Sanitary Engineering at Guheshwori Sanitary Treatment Plant Water Supply Engineering at Sundharijal Water Supply Plant Transportation Engineering at Phanchakhal / Dolalghat, Naubise Steel Structure at Radha Steel, Thimi

Geology Engineering at Chanlakhel and Dashinkali Irrigation at Sunsari Morang Irrigation Project, Chatra

Hydrology at Salinadi

Hydropower Engineering at Marsyangdi, Modi, Seti, Fewa, and Kali Gandaki Hydro-Power Plant

Languages: English, Nepal Bhasa, Nepali, Hindi, Italian

I, hereby declare that the information provided above is true to best of my knowledge.

Rome 17/07/2014

Sanjeev Prajapati