

Professor Emeritus Gyan N Pande (1939-2020)

Zienkiewicz Centre for Computational Engineering, Swansea University, Swansea SA1 8EN, UK, <https://www.swansea.ac.uk>, President, International Centre for Computational Engineering, Rhodes, <http://www.ic2e.org>, Director, PP Computational Mechanics Inc. – a consulting company registered in Ontario, Canada.

Academic degrees: B.Tech. (IIT, KGP), Ph. D., D. Sc. (Swansea), F.I.C.E. (London), C. Eng.

Areas of research interests

Geomechanics: Modelling of behavior of geomaterials (soils, rocks, concrete, masonry etc.) subjected to monotonic and/or fluctuating loads. Strength and FE Analysis of concrete, masonry and earth dams. Influence of rotation of principal stress axes through multilaminate models and numerical analysis of geotechnical structures, such as slopes, dams, offshore structures. Modelling of unsaturated geomaterials, Stone column reinforced foundation, Artificial Intelligence and its applications, Self-learning finite element analysis for large structures as well physical model tests. Supervised over 40 M. Sc. and Ph. D. students from many countries including India, China, Brazil, Austria, UK, Iraq, Iran, Korea, Greece, Japan, Indonesia, and Finland in engineering on a wide variety of subjects in geotechnical engineering and engineering mechanics.

Research

Publications:

Refereed papers: over 80; Books: 1. 'Finite Elements in Geotechnical Engineering', Naylor & Pande, Pineridge Press, (translated into Japanese); 2. 'Numerical Methods in Rock Mechanics' Pande, Beer & Williams, Edited books: Soils under cyclic and transient loads, Pande & Zienkiewicz, Wileys, Conference Proceedings: Over 20

Journals:

Founder Editor of Intern. Journal 'Computers and Geotechnics', Elsevier Science Ltd.; Chief Editor (1985-2011)

Awards

Significant paper award of **IACMAG** 2001, 2002

Best paper award – **Journal of Rock Mechanics & Tunnelling Technology**, 2003

The Manby Prize, **Institution of Civil Engineers**, London, 2005

Significant Research Award of **IACMAG** 2014

Organization of Conferences:

- Organized, in collaboration with Prof. Pietruszczak, McMaster University, Canada, a series of International Symposia on 'Numerical Models in Geomechanics' (NUMOG). The past meetings took place in Zurich, Switzerland (1982); Ghent, Belgium (1986); Niagara Falls, Canada (1989); Swansea, U.K. (1992); Davos, Switzerland (1995); Montreal, Canada (1997); Graz, Austria (1999); Rome, Italy (2002); Ottawa, Canada (2004) and Rhodes, Greece (2006).

- Organized, in collaboration with Prof. Pietruszczak, a series of International Symposia on 'Computational Geomechanics' (ComGeo). The past meetings took place in Juan-les-Pins, France (2009); Dubrovnik, Croatia (2011), Krakow, Poland (2013) and Assisi, Italy (2018).

Industrial consulting/collaboration

Prof. Pande has been a member of large number of committees e.g. International Expert Committee to advise Hydro Quebec on rehabilitation and restoration of a powerhouse in Quebec, Canada,

Chairman 'International Committee on 'Computer Modelling of Masonry structures' set up by the RILEM Structures), Cachan, France, UK Steering Committee NAFEMS, Member, Advisory Panel of Geotechnique, Chairman, Ground Engineering Group, Institution of Civil Engineers, Wales Branch. Professor has been a consultant to a large number of organisations Korea Institute of Construction Technology, Korea, GeoSoft, Singapore, Schlumberger, UK, Hydro-Québec, Canada, MIDAS, South Korea, Arup, London, VIPS (UK), British Petroleum, PLAXIS, Netherlands, United Nations, China.

Extra-curricular

Founder and Honorary Secretary of TRIDEV Meditation & Spiritual Awareness Society, which is registered charity in England & Wales.