# **CURRICULUM VITAE**



Name: Carlos Alberto BREBBIA

**Education:** Military Lyceum - Santa Fe, Argentina

Military College - Buenos Aires

**Qualifications:** First Degree in Civil Engineering -

University of Litoral, Argentina

PhD University of Southampton - England

**Nationality:** British and Argentine

Marital Status: Married

**Children:** Two

## **PAST APPOINTMENTS:**

- Research Associate at the Institute of Applied Mechanics and Structures, Rosario, Argentina under Prof. J N Distefano
- Research student at the University of Southampton under the supervision of Professor H Tottenham
- Rotary Fellow at the Department of Civil Engineering, Massachusetts Institute of Technology under Professor JJ Connor
- PhD Degree awarded by the University of Southampton
- Research Fellow at the Central Electricity Research Laboratories, Leatherhead, Surrey, England
- Lecturer at the Department of Civil Engineering, University of Southampton
- Visiting Associate Professor at the Department of Civil Engineering, Princeton University, USA.

- Senior Lecturer and Reader at the Department of Civil Engineering, University of Southampton.
- Professor of Civil Engineering, University of California, Irvine, USA.

## **CURRENT POSITIONS**

- Founder and Director of Wessex Institute of Technology, Southampton, UK
- Chairman of Computational Mechanics International, UK
- Professor of Computational Engineering, University of Portsmouth, UK

## **SPECIAL HONOURS**

Medaille de la Ville de Paris, Echelon Argent.

Medaille of the Masonnet Foundation, University of Liege, Belgium.

Visiting Professor for Special Lecture Series at the Free University of Brussels, Belgium.

Visiting Professor for Special Lecture Series at the University of Florence, Italy.

President of the International Society for Boundary Elements (ISBE).

Fellow of the Institution of Mechanical Engineers (FImechE), UK.

Founding President - ASCE-UK Chapter.

Honorary PhD at University of Bucharest.

Freedom of the City of London and Liveryman to the Worshipful Company of Scientific Instrument Makers.

Fellow of the Royal Society of Arts (Royal Society for the encouragement of Arts, Manufacturers and Commerce).

Fellow of the American Society of Civil Engineers (ASCE).

Member of the European Academy of Sciences and Arts.

#### **JOURNALS & SERIES PUBLICATIONS**

- 1. Editor in Chief and Founder of the International Journal of Applied Mathematical Modelling, Published by I.P.C. Started the Journal in 1976. Resigned in 1983.
- 2. Editor and Founder of Advances in Water Resources, Published by C.M. Publications, 1976-89.
- 3. Editor and Founder of 'Lecture Notes in Engineering'. Springer-Verlag, Berlin. Series ended in 1991.
- 4. Editor of 'Progress in Boundary Element Methods' Series. Pentech Press and Wiley. Series ended.
- 5. Editor of 'Topics in Boundary Element Research' Series. Springer-Verlag, Berlin, NY. Series ended in 1991.
- 6. Editor and Founder of International Journal on "Engineering Analysis with Boundary Elements" Published by Elsevier. Started the Journal in 1982. Resigned in 2011.
- 7. Editor and Founder of the International Journal on "Software for Engineering Workstations", published by C.M.L. Publications 1980. Resigned in 1989.
- 8. Editor and Founder of "Topics in Engineering" Series, published by C.M.L. Publications.
- 9. Editor and Founder of "Computational Engineering" Series, published by CML Publications and Elsevier. Series ended.
- 10. Editor and Founder of the International Journal "Boundary Element Communications", CML Publications, 1989 1997.
- 11. Editor and Founder of the "Advances in Boundary Element Series", published by WIT Press. Series ended.
- 12. Editor of the Transactions of Wessex Institute, WIT Press.
- 13. Member of the Editorial Board of several Journals and Book Series'.
- 14. Coordinator of "International Journal of Design & Nature and Ecodynamics" WIT Press..
- 15. Coordinator of "International Journal of Sustainable Development and Planning" WIT Press.
- 16. Co-Editor of "International Journal of Safety and Security" WIT Press.
- 17. Co-Editor of "International Journal of Computational Methods and Experimental Measurements" WIT Press

#### **FILMS**

`Finite Elements'

This film produced by Rutherford Computing Laboratory, shows two computer animations produced by Dr Brebbia's research group.

'Boundary Elements'

This film was produced by Dr Brebbia and shows results obtained using the analysis technique developed at Southampton University.

#### **PAPERS**

Around 300 papers published in Scientific Journals and Conference Proceedings.

## MAIN INTERESTS

Computational Methods in Engineering. Boundary Elements. Modelling of Fluids and Solids. Environmental Problems Simulation. Structural Engineering including Restoration of Cultural Heritage. Ecological Modelling. Design and Nature. Sustainable Development and Eco-Architecture.

## **BOOKS WRITTEN**

- 1. "Fundamentals of Finite Element Techniques for Structural Engineers" (Co-author). Butterworths (England) and Wiley (U.S.A.) 1973. Translated into several languages.
- 2. "Vibrations of Engineering Structures" (Co-author) Computational Mechanics, England 1976. Reprinted Springer-Verlag, Lecture Notes in Engineering Series, Vol., 10, 1984.
- 3. "Finite Elements for Fluid Flow" (Co-author). Butterworths, England, 1975. Second edition 1977. Translated into several languages.
- 4. "Computational Methods for the Solution of Engineering Problems" Pentech Press, England and Crane & Russak, USA. 1977. Japanese edition, 1980. Second English edition, 1980. Third edition, 1985.
- 5. "The Boundary Element Method for Engineers" (Author) Pentech Press 1978. Translated into several languages. It has been reprinted many times.
- 6. "Analysis of Offshore Structures" (Co-author). Butterworths, London, 1979.
- 7. "Boundary Element Techniques in Engineering". (Co-author). Butterworths, London, 1980. Translated into Japanese, Russian, Chinese and others.
- 8. "Computational Hydraulics" (Co-author). Butterworths, London, 1983.

- 9. "Basic Computational Techniques for Engineers". (Co-author). Pentech Press, London, 1983.
- 10. "Boundary Elements Theory and Practice in Engineering". (Co-author). Springer-Verlag, Berlin and New York, 1984. Translated into Russian, Japanese and Chinese.
- 11. "Boundary Elements. An Introductory Course (Co-author). Computational Mechanics Publications, Southampton and McGraw Hall, New York, 1989. Translated into Japanese. 2nd Edition, 1992, several printings.
- 12. "Boundary Elements in Fluid Dynamics" (Co-author) Computational Mechanics Publications, Southampton, 1992.
- 13. "The Dual Reciprocity Boundary Element Method", Computational Mechanics Publications, Southampton and Elsevier, London, 1992.
- 14. "Boundary Element Methods for Electrical Engineers", WIT Press, Southampton and Boston 2005.

## SCIENTIFIC AND TECHNICAL BOOKS EDITED

Over 500 books edited.

## NON-TECHNICAL BOOKS

"The New Forest, A Personal View" WIT Press, 1998 (reprinted several times)

"Patagonia. A Forgotten Land." WIT Press, 2006 (reprinted several times)

## **CLUB MEMBERSHIP**

Royal Southampton Yacht Club The Carlton Club