

\int ractical Calculus & \int Applied Analysis

An International Journal for Theory and Applications

VOLUME 11, NUMBER 3 (2008) ISSN 1311-0454

Professor GARY F. ROACH's 75th Anniversary

Gary Francis ROACH, Professor Emeritus - Department of Mathematics, University of Strathclyde, Glasgow, UK, had on 8 October 2008 his 75th jubilee. He is a **Honorary Member of Editorial Board of our "FCAA" Journal** since its start 10 years ago, in 1998.

Date of Birth: 8th October, 1933.

Education:

- B.Sc. (Mathematics, Physics, University of Wales, 1955)
- M.Sc. (Mathematics, University of London, 1960)
- Ph.D, (Mathematics, University of Manchester, 1964)
- D.Sc. (Mathematics, University of Manchester, 1991)
- Sc.D. (Technical University, Lodz, 1993)

Professional Bodies:

- C. Math.
- Fellow, Royal Astronomical Society
- Fellow, Institute of Mathematics and its Applications
- Fellow, Royal Society for Encouragement of Arts, Manufacture and Commerce
- Fellow, Royal Society of Edinburgh

Career:

- R.A.F. (Education Branch), 1955-1958; Subjects: Mathematics, Radio, Radar; Status: F/O, F/Lt.
- Research Mathematician British Petroleum Company Ltd., 1958-1961; (During this period publication in Journals was not allowed due to commercial interests. However, four patents were obtained.)
- University of Manchester Institute of Science and Technology, 1961-1966; Status: Lecturer
- University of British Columbia, 1966-1967; Sabbatical year: Visiting Professor
- University of Strathclyde, 1967-

Service to Strathclyde University:

Senate, Court

Chairman of Department: 1980-1982

Dean (The first), Faculty of Science: 1982-1985

Service to Outside Bodies:

Past President Edinburgh Mathematical Society

Convener: Mathematics Panel, Scottish University Council on Entrance

Convener: Conference of Professors of Applied Mathematics

Convener: Universities and Colleges Admissions Service (Scotland) Co-ordinating Committee

Managing Editor, Mathematical Methods in the Applied Sciences

Editorial Board: Pitman/Longman Series

Research Interests:

Scattering Processes in Nonhomogeneous, Anisotropic Media, Nonlinear Evolutionary Processes, Inverse Scattering Problems

Publications:

Books: 4; Papers: In excess of 150 (a partial list of them can be found in our journal: *Fract. Calc. Appl. Anal.* **6**, No 4 (2003), pp. 341-354).

Co-author and Editor of more than 10 other books and proceedings;

Author of 4 patents

Ph.D. Students: 20

Additional Facts from his Curriculum Vitae:

- Awarded the Fellowship of the Royal Astronomical Society in 1964, this was for the work did in his Ph.D. thesis entitled "Dynamical Theory of Viscous Tides in Close Binary Systems". Whilst the Thesis was mainly theoretical, nevertheless, it did contain a substantial amount of numerical analysis and computation. His work was supported by a grant from NASA and the results obtained there were used in their early satellite programmes

- Received Fellowship of the Royal Society of Edinburgh in 1977 for his researches into Scattering Theory and the Theory of Integral Equations. At that time, he was one of the first non-professorial mathematicians to be elected Fellow of the Society.

- Elected, in Canada, to the prestigious appointment of Killam Research Professor. He was the first mathematician ever to have received this appointment.

- In the UK the award of the degree of D.Sc. is considered to be very prestigious. Furthermore, in the area of mathematics it is a comparatively rarely held degree. Manchester University, from which he received this

degree, is regarded as being one of the more demanding of universities when it comes to awarding a D.Sc. Therefore, it was a great honour for G. Roach to be invited to submit some of his researches for scrutiny by Manchester University and to have it approved for the award of their D.Sc.

- International recognition for G. Roach's research work has been emphasized by the award of Sc.D. (Honoris Causa) from the Technical University of Lodz. Again, this was for his work in the general field of Applied Analysis and, in particular, Scattering Theory.

- Invited Professor to many prestigious universities and institutions abroad, in North America, Western and Eastern Europe, as: Holland, Germany, Greece, Poland, Belgium, China, South Africa, USA, Canada, etc.

- European Editor of the Journal "Applicable Analysis" and one of the 2 founding Managing Editors of the journal "Mathematical Methods in the Applied Sciences". This latter journal has been running successfully for 26 years and has become a well established part of academic literature.

Consultancies and Contacts with Industry:

Since returning to an academic life, Prof. G. Roach has maintained a constant and very active involvement with industry and its associated problems. Without giving precise details for the industrial companies for which he acted as a Consultant, a partial description of the problems addressed, are as follows: British Petroleum (1977-1983); British Telecommunications (1983-1989); Ferranti (ORE, 1983-1987); British Gas (1984-); Imperial Chemical Industries (1984-). All this work was written up in the form of Internal Reports for the industry concerned. They were confidential and practically all were not for publication in the technical journals, but written up on a regular basis - usually a minimum of two per annum.

A Proceeding Dedicated:

Interesting stuff on Prof. Roach's scientific and life achievements can be found in the book "*Mathematical Methods in Scattering Theory and Biomedical Technology*" (Eds: G. Dassios, D.I. Fotiadis, K. Kiriaki, C.V. Massalas), Pitman Res. Notes in Math. Ser. **390**, CRC Press, 1998 (ISBN 0582368049, 9780582368040). These are the Proceedings of a workshop dedicated to Professor Gary Roach, on occasion of his retirement, held in Metsovo, Greece. The papers in this volume address the state-of-the-art and future directions in applied mathematics in both scattering theory and biomedical technology,

see at: [http://books.google.bg/books?id=](http://books.google.bg/books?id=YfYwH0ncIwkC&pg=PA185&lpg=PA185&dq=#PPP1,M1)

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