## Galo Carrera (Mexico)

### **Personal**

Birthdate: 19 August 1953

Languages: Equally bilingual in English and Spanish, and some experience in French

### Awards and distinguished posts

1979

Second Place in the Second National Contest of Scientific Research for Young Scientists. Contest organized by the National Autonomous University of México

1989

Vice-President of the Canadian Hydrographic Association

1988-1989

Chairman of the Special Study Group on Geodetic Aspects of International Maritime Boundary Delimitation of the Canadian Hydrographic Association

1992-1993

 $Executive\ Board\ Member\ of\ Hypercomp,\ a\ High\ Performance\ Computing\ h\ Perform\ so\ T/\ 4ao6(Hydrog)-6(w\ 0\ Ts\ -6w, w)$ 

2000

Guest professor, Second Institute of Oceanography, State Oceanic Administration, Hangzhou, People's Republic of China

2000

Fellow of the International Association of Geodesy (IAG). Appointed by decision of the IAG Executive Committee at its meeting in Nice, 28 April

2001-2006

Elected member, Legal and Technical Commission of the International Seabed Authority, United Nations

2002-2007

Re-elected member, Commission on the Limits of the Continental Shelf, United Nations

2006-

Research Associate, Marine Affairs program, Dalhousie University, Halifax, Nova Scotia, Canada

2007-

Visiting Professor, World Maritime University, Malmo, Sweden

2007-2012

Re-elected member, Commission on the Limits of the Continental Shelf, United Nations

2007-

Visiting Lecturer, University of Lund, Lund, Sweden

#### Research endeavours

Geodetic and hydrographic methodologies for international maritime boundary delimitation

Scientific and technical determination of the outer limits of the continental shelf

Optimum design of geodetic positioning for baselines and geodynamic applications

Statistical analysis of information from sea and lake water level gauges and

Investigation of mathematical models for the determination of movements of the earth's crust

### International maritime boundary delimitation experience

1987-Present Adviser and external consultant with the following organizations (in chronological order):

South Pacific Forum Fisheries Agency, Honiara, Solomon Islands

Commonwealth Secretariat, London, United Kingdom

Ministry of Foreign Affairs, Kingston, Jamaica

Department of Foreign Affairs, Manila, Philippines

Department of Foreign Affairs, St George, Grenada

Department of Foreign Relations (SRE), México

Petroleum Directorate, Province of Nova Scotia, Halifax, Canada

Ministry of Land Use and Habitat, Victoria, Mahe, Seychelles

Ministry of Foreign Affairs, Muscat, Oman

- Chairman, Research Group on Geodesy
- Chairman, Editorial Committee of the Scientific and Technical Guidelines Chairman of the Editorial Committee Working Groups on:
  - 1. Introduction
  - 2. Entitlement to and delineation of the outer limits of the continental shelf
  - 3. Geodetic Methodologies and the outer limits of the continental shelf
  - 10. References and Bibliography; and

Annex I. List of International Organizations

Member of the Editorial Committee Working Groups on:

- 4. The 2,500 m isobath
- 5. Foot of the slope determined as the point of maximum change in the gradient at its base
- 6. Foot of the slope determined by evidence to the contrary to the general rule
- 9. Information on the outer limits of the continental shelf; and Annex II. Flowcharts, tables, and illustrations summarizing the procedure for establishing the outer limits of the continental shelf

Fourth Session of the Commission on the Limits of the Continental Shelf.

International Association of Geodesy (IAG) and Intergovernmental Oceanographic Commission (IOC) on Technical Aspects of Maritime Boundary Delineation and Delimitation, Including UNCLOS Article 76 Issues. International Hydrographic Bureau, Montecarlo, Principality of Monaco, 9-10 September

• ABLOS Session Convener, Chairman, and Speaker, Invited Session of the Commission on the Limits of the Limits of the Continental Shelf:

Carrera, G. (1999). Wide Continental Margins of the World: A Survey of Marine Scientific Requirements Posed by the Implementation of Article 76 of the United Nations Convention on the Law of the Sea

Carrera, G. (1999). The impact of the seabed roughness on the location of the outer limits of the extended continental shelf

Albuquerque A. and G. Carrera (1999). Information on the outer limits of the extended continental shelf

2000 Seventh Session of the Commission on the Limits of the Continental Shelf. United Nations Headquarters, New York, NY, USA, 1-5 May (CLCS/21)

- Chairman, Editorial Committee. Basic flowchart for preparation of a submission of a coastal State to the Commission on the Limits of the Continental Shelf (CLCS/22)
- Member, Working Group on Training
- Chairman, Standing (five-member) Committee on Confidentiality
- Convener, Co-Chairman and Speaker, Open Meeting of the CLCS, United Nations Headquarters, New York, New York, USA, 1 May:

Astiz, P.O. and G. Carrera (2000). Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf: Part I, Chapters 1 to 3. Open Meeting of the CLCS

Srinivasan, K. R. and G. Carrera (2000). Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf: Part II, Chapters 4 to 6. Open Meeting of the CLCS

Jura i, M. and G. Carrera (2000). Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf: Part III, Chapters 7 to 9

Carrera, G. (2000). Geographic scope and scientific challenges posed by Article 76 of the United Nations Convention on the Law of the Sea

Carrera, G. and A. Albuquerque (2000). An outline for the preparation of a national submission to the Commission on the Limits of the Continental Shelf

- 2000 Eighth Session of the Commission on the Limits of the Continental Shelf. United Nations Headquarters, New York, NY, USA, 28 August-1 September (CLCS/25)
  - Chairman, Standing (five-member) Committee on Confidentiality. Revision of Annex II to the Rules of Procedure (CLCS/3/Rev.3)
  - Chairman of the Editorial Committee. Outline for a five-day training course for delineation of the outer limits of the continental shelf beyond 200 nautical

- miles and for preparation of a submission of a coastal State to the Commission on the Limits of the Continental Shelf (CLCS/24)
- Member, Working Group on Training
- Ninth Session of the Commission on the Limits of the Continental Shelf.
  United Nations Headquarters, New York, NY, USA, 21-25 May (CLCS/29)
  - Chairman, Standing (five-member) Committee on Confidentiality. Corrigendum (CLCS/3/Rev.3/Corr.1)
  - Chairman of the Editorial Committee. Internal Procedure of the Subcommission of the Commission on the Limits of the Continental Shelf (CLCS/L.12)
  - Member, Working Group on Training
- Tenth Session of the Commission on the Limits of the Continental Shelf. United Nations Headquarters, New York, NY, USA, 25 March-12 April (CLCS/32)
  - Elected Member, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Russian Federation
  - Elected Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Russian Federation
  - Member, Working Group on Training
  - Co-Editor, Training Manual on the Continental Shelf. Division of Ocean Affairs and the Law of the Sea
- Session of Subcommission on the Limits of the Continental Shelf. United Nations Headquarters, New York, NY, USA, 10-14 June (CLCS/34)
  - Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Russian Federation on 20 December 2001 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles. Coordinator of the working groups on geology and geophysics, hydrography-morphology, and other scientific information. Recommendations prepared by the Subcommission of the CLCS, established for the consideration of the submission made by the Russian Federation. Adopted by the Subcommission on 14 June 2002, and transmitted for approval to the Commission on the Limits of the Continental Shelf
- Elected member for the period 2002-2007 by the Twelfth Meeting of States Parties to the United Nations Convention on the Law of the Sea, United Nations Headquarters, New York, NY, 18 April (SPLOS/91)
- Eleventh Session of the Commission on the Limits of the Continental Shelf. United Nations Headquarters, New York, NY, USA, 24-28 June (CLCS/34)
  - Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Russian Federation.

    Recommendations of the Commission on the Limits of the Continental Shelf (CLCS) in regard to the submission made by the Russian Federation on 20 December 2001 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles. Recommendations prepared by

Minerva Seamount, Vitoria Trindade Ridge, Sao Paulo Plateau, and Southernmost Points

2005 Sixteenth Session of the Commission on the Limits of the Continental Shelf.
United Nations Headquarters, New York, NY, USA, 29 August-16 September
2005 (CLCS/48)

• Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Federal Republic of Brazil on 17 May 2004 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles. Coordinator of the work conducted by the working groups on geology, hydrography, and seismic information. Member of the intersessional working groAti(Ri)-7TAm0.0175 Tc -0.0002 Tw 0 -1-6(s)]TJ,-J

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Elected member for the period 2007-2012 by the Seventeenth Meeting of States Parties to the United Nations Convention on the Law of the Sea( )Tj/TT0

- Twenty-fourth Session of the Commission on the Limits of the Continental Shelf. United Nations headquarters, New York, NY, USA, 10 August-11 September 2009 (CLCS/64).
  - Chairman, Subcommission on the Limits of the Continental Shelf for the
    consideration of the submission made by France. Presentation of the Draft
    Recommendations of the Commission on the Limits of the Continental Shelf
    (CLCS) in regard to the submission made by France on 22 May 2007 of
    information on the proposed outer limits of its continental shelf beyond
    200 nautical miles.
  - Elected Member, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by Japan on 12 November 2008.
  - Elected Vice-Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by Japan on 12 November 2008 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
  - Member of the ad hoc working group relating to the Notes Verbales submitted by States on the Submission made by Japan.
  - Presentation on the Workload of the Commission to the Bureau of the Meeting of States Parties, 1 September 2009.

- Presentation on behalf of the CLCS to the Informal Working Group of the Meeting of States Parties concerning the workload of the Commission, 5 April 2011.
- Twenty-eighth Session of the Commission on the Limits of the Continental Shelf. United Nations headquarters, New York, NY, USA, 15-26 August 2011 (CLCS/72).
  - Vice-Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by Japan on 12 November 2008 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
  - Report of training activities conducted by the Government of Angola with the assistance of DOALOS and the participation of members and former members of the CLCS.
  - Elected Member, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Cook Islands on 16 April 2009.
  - Elected Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Cook Islands on 16 April 2009 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.

## Summary of appointments in subcommissions of the Commission on the Limits of the Continental Shelf, 1997-2010

- 2002 Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Russian Federation on 20 December 2001 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
- 2002 Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Federal Republic of Brazil on 17 May 2004 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
- 2007 Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by France on 22 May 2007 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
- Vice-Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by Japan on 12 November 2008 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.
- Chairman, Subcommission on the Limits of the Continental Shelf for the consideration of the submission made by the Cook Islands on 16 April 2009 of information on the proposed outer limits of its continental shelf beyond 200 nautical miles.

12-26137 41

# Activities in the Legal and Technical Commission of the International Seabed Authority, 2002-2007

- 2002 Elected member for the period 2002-2007 by the Council of the International Seabed Authority represented by States Parties to the United Nations Convention on the Law of the Sea, International Seabed Authority Headquarters, Kingston, Jamaica, 13 March.
- Session of the Legal and Technical Commission, 5-9 August. Eighth Session of the International Seabed Authority. Kingston, Jamaica, 5-16 August (ISBA/8/C/6).
  - Evaluation of the annual reports submitted by contractors. Report and recommendations of the Legal and Technical Commission (ISBA/8/LTC/2).
  - Chairman, Environment Committee of the LTC.
- Session of the Legal and Technical Commission, 21 July-1 August. Ninth Session of the International Seabed Authority, Kingston, Jamaica, 28 July-8 August (ISBA/9/C/4).
  - Evaluation of the annual reports submitted by contractors. Report and recommendations of the Legal and Technical Commission (ISBA/9/LTC/2).
  - Chairman, Environment Committee of the LTC.
  - Presentation of "Legal and Scientific Issues Relating to the Preparation of Draft Regulations on Prospecting and Exploration for Polymetallic Sulphides and Cobalt-Rich Crusts: Environmental Impact of Exploration Activities"
  - Report of the Environmental Committee: Draft Regulations Draft Regulations on Prospecting and Exploration for Polymetallic Sulphides and Cobalt-Rich Crusts
- Session of the Legal and Technical Commission, 18-28 May. Tenth Session of the International Seabed Authority, Kingston, Jamaica, 24 May-8 June (ISBA/10/C/).
  - Evaluation of the annual reports submitted by contractors. Report and recommendations of the Legal and Technical Commission (ISBA/10/LTC/).
  - Chairman, Environment Committee of the LTC.
- Session of the Legal and Technical Commission, 18-28 May. Tenth Session of the International Seabed Authority, Kingston, Jamaica, 15-26 August (ISBA/11/C/8).
  - Evaluation of the annual reports submitted by contractors. Report and recommendations of the Legal and Technical Commission.
  - Chairman, Environment Committee of the LTC.

### Publications and scholarly addresses

Over 190 combined publications in journals published, reports and scholarly addresses made in international conferences, seminars and courses in all five continents.

Lecturer in the four United Nations Regional Training Courses on the Preparation of a submission to the Commission on the Continental Shelf held in

- Suva, Fiji, 28 February-4 March 2005;
- Colombo, Sri Lanka, 16-20 May 2005;
- Accra, Ghana, 5-9 December 2005; and
- Buenos Aires, Argentina, 8-12 May 2006.

four Sub-regional Training Courses held in

- Bandar Seri Begawan, Brunei Darussalam, 12-16 February 2007;
- Cape Town, South Africa, 13-17 August 2007;
- Port of Spain, Trinidad and Tobago, 14-18 January 2008; and
- Wyndhoek, Namibia, 22-26 September 2008.

a national Training Course held in

Luanda, Angola, 16-20 May 2011.

Co-author and co-editor of the United Nations publication:

"Law of the Sea, The: Training Manual for Delineation of the Outer Limits of the Continental Shelf Beyond 200 Nautical Miles and for Preparation of Submissions to the Commission on the Limits of the Continental Shelf. Released in February 2007. English (also available in French, Spanish) ISBN13: 9789211337419, Sales Number: 06.V.4, 530 page(s), 8.5x11, Paperback, Publisher: United Nations, Office of Legal Affairs.

### Symposium participation

Over 70 international symposia and conferences attended from 1977 to 2011.