

# PROCEEDINGS

JULY  
9•10•11  
1997

MAYAGUEZ

PUERTO  
RICO

CARIBBEAN  
COUNTRIES  
AND THE  
INTER-  
AMERICAN  
INSTITUTE  
FOR

# GLOBAL CHANGE

RESEARCH





PROCEEDINGS  
CONFERENCE/WORKSHOP ON THE  
CARIBBEAN COUNTRIES AND THE  
INTER-AMERICAN INSTITUTE FOR GLOBAL  
CHANGE RESEARCH (IAI)

July 9-11, 1997

*Organized by*

Center for Hemispherical Cooperation in Research and Education in  
Engineering and Applied Science (CoHemis)

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University of Puerto Rico  
University of Puerto Rico at Mayagüez  
Inter-American Institute for Global Change Research (IAI)  
Tourism Department of Puerto Rico  
WesternBank  
Café Yaucono  
Mayagüez City Mayor

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Edited by

Fernando Gilbes  
Jorge I. Vélez-Arocho  
Conference Directors

University of Puerto Rico  
Mayagüez, Puerto Rico  
March 1998

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***Conference/Workshop on the Caribbean Countries  
and the Inter-American Institute for  
Global Change Research (IAI)***

**July 9, 10 & 11, 1997  
Mayagüez, Puerto Rico**

***Organizing Committee***

Paul Filmer  
Program Director  
Regional Research Institutes  
National Science Foundation

Armando Rabuffetti  
Director  
Inter-American Institute for Global Change Research (IAI)

Fernando Gilbes  
Principal Investigator  
Marine Sciences Department, UPRM

Jorge I. Vélez-Arocho  
Co-Principal Investigator, CoHemis

Luz Leyda Vega-Rosado  
Coordinator, CoHemis

Grant No. ATM-9724718



***Wednesday, July 9, 1997 - morning***

**7:30 - 8:15**

Registration: Room 4, Convention Center  
Best Western Mayagüez Resort and Casino

**8:15 - 8:30**

Opening of the Conference  
**Fernando Gilbes**, Principal Investigator  
University of Puerto Rico at Mayagüez  
**Jorge I. Vélez-Arocho**, CoHemis Co-Director and  
Conference Co-Principal Investigator  
University of Puerto Rico at Mayagüez

**8:30 - 8:45**

Welcoming Remarks  
**Antonio Santos-Cabrera**, Acting Chancellor  
University of Puerto Rico at Mayagüez  
  
**Jorge A. Cruz Emeric**  
Acting Director of the Academic Affairs Office  
Office of the President  
University of Puerto Rico

**8:45 - 9:30**

*The Inter-American Institute for Global Change Research (IAI): An Instrument to  
Enhance Collaborative Global Change Research in the Americas*  
**Armando Rabuffetti**, Director  
Inter-American Institute for Global Change Research

**9:30 - 10:15**

*Imperatives for Engineering Education and Practice in the Commonwealth Caribbean*  
**Gurmohan S. Kochhar**  
The University of the West Indies - Trinidad

**10:15 - 10:30**

Coffee Break

**10:30 - 11:15**

*Strategies and Policy Initiatives Related to the Issues of Global Climate Change in  
Barbados*  
**Rawleston Moore**  
Ministry of Health and Environment, Barbados

**11:15 - 12:00**

*Strategies of the Dominican Republic Towards Developing a Global Change Policy*  
**Zoila González, Josefina Gómez**  
Dominican Republic

**Wednesday, July 9, 1997 - afternoon**

**12:00 - 2:00**

**Lunch:** Flamboyán and Mangó Room  
Best Western Mayagüez Resort and Casino

**Presentation:** *Globalization and Global Change: Effects on the Proposal for Sustainable Development*  
**Daniel Pagán, Secretary**  
Department of Natural Resources and Environment, Puerto Rico

**2:00 - 2:45**

*Using SST Anomaly to Predict Wet and Dry Conditions in the Caribbean in May and June and Application of Aspects of this Research, Especially to the Sugar Industry*  
**Anthony Chen, Abraham Roy, John McTavish, Michael Taylor, and Larry Marx**  
The University of the West Indies, Jamaica

**2:45 - 3:30**

*Regional Cooperative Activities to Support Global Change Research in IAI Countries*  
**Eduardo M. Banús, Project Director WMO/GEF/IAI Project**  
Inter-American Institute for Global Change Research (IAI), Brazil

**3:30 - 3:45**

Coffee Break

**3:45 - 4:30**

*The Changing Climate of Institutional Responses to Global Warming: the Caribbean Calm Before the Storm*  
**Edward L. Towle**  
Islands Resources Foundation, St. Thomas

**4:30 - 5:15**

*The Caribbean Meteorological Institute and its Work Related to Climate Change*  
**Colin A. Depradine**  
Caribbean Meteorological Institute, Barbados

**5:15 - 6:00**

General Discussion and Summary

**Thursday, July 10, 1997 - morning**

**8:30 - 9:15**

**Registration:** Room 4, Convention Center  
Best Western Mayagüez Resort and Casino

**9:15 - 10:00**

*The University in the Context of Global Change*  
**Ariel Azael**  
Université Quisqueya (UniQ), Haiti

**10:00 - 10:15**

*The International Research Institute for Climate Prediction and Related Applications Activities*  
**Lisa Farrow**  
NOAA Office of Global Programs

**10:15 - 10:30**

Coffee Break

**10:30 - 11:15**

*Hydrographic, Meteorological and Oceanographic Interests of the US Virgin Islands*  
**Roy A. Watlington**  
University of the Virgin Islands, St. Thomas

**11:15 - 12:00**

*Environmental and Infrastructure Imperatives in the Commonwealth Caribbean*  
**Clement A. C. Imbert, H. Farabi and Gurumohan S. Kochhar**  
The University of the West Indies - Trinidad

**Thursday, July 10, 1997 - afternoon**

**12:00 - 2:00**

**Lunch:** Flamboyán and Mangó Room  
Best Western Mayagüez Resort and Casino

**Presentation:** *Activities in the Center for Hemispherical Cooperation*  
**Dr. Jorge I. Vélez-Arocho, Co-director**  
Center for Hemispherical Cooperation (CoHemis)  
University of Puerto Rico at Mayagüez

**2:00 - 2:45**

*The IAI Data and Information System, the SPRING 2.0 Geographic Information System, and IAI Data Policy Statements*  
**Paul Filmer, Program Director**  
Regional Research Institutes  
National Science Foundation

2:45 - 3:30

*Global Change and the Evolution of the Environment in Cuba*  
**Bárbara Garea**  
Ministry of Science, Technology and Environment, Cuba

3:30 - 3:45

Coffee Break

3:45 - 4:30

*Climate, Climate Forecasting, and Sugar Production in Trinidad and Tobago: A Preliminary Analysis*  
**Roger Pulwarty**  
University of Colorado

4:30 - 5:15

*Results of Cuban Oceanographic Research Related to Global Change Studies*  
**Iván Victoria**  
Institute of Oceanology, Cuba

5:15 - 6:00

General Discussion and Summary

### *Friday, July 11, 1997 - morning*

8:00

Registration: Room 4, Convention Center  
Best Western Mayagüez Resort and Casino

9:00 - 9:45

*Strategies for Integration of the Caribbean Countries in to the IAI*  
**Armando Rabuffetti**, IAI Director  
Inter-American Institute for Global Change Research, Brazil

9:45 - 10:00

Coffee Break

10:00 - 12:00

Working Groups

### *Friday, July 11, 1997 - afternoon*

12:00 - 2:00

Lunch: Flamboyán and Mangó Room  
Best Western Resort and Casino, Mayagüez

**Presentation:** *Activities in the Tropical Center for Earth and Space Studies*  
**Fernando Gilbes**, Principal Investigator  
University of Puerto Rico at Mayagüez,

2:00 - 3:00

Working Groups

3:00 - 4:00 PM

Groups Discussion

4:00 - 5:00 PM

Recommendations

Closing Remarks

**Fernando Gilbes and Jorge I. Vélez-Arocho**

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## PART I. CONFERENCE PAPERS

If you are interested in receiving copy of this book, please contact:  
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