



In Collaboration  
with:



# Symposium Program

Convened by:

Science Without Borders®



علم بلا حدود®

KHALED BIN SULTAN  
LIVING OCEANS FOUNDATION

***King Abdullah University  
of Science and Technology-KAUST***

**08-10 January 2012  
14-16 Safar 1433H**

[www.crcrss.org](http://www.crcrss.org)



KAU



SWC



PERSGA

PERSGA



PME



MOA

## ► Day 1: 08 January 2012

09:00-All Day Registration: (Jeddah Hilton).

20:00-21:35 Opening Ceremony (Venue: Hyatt Park Hotel)

20:00-20:05 Welcome Address:

20:05-20:15 The Role of King Abdulaziz University in research & education in marine science  
**Prof. Osama Tayeb, President, King Abdulaziz University.**

20:15-20:25 The Role of KAUST in Red Sea Marine Research,  
**Prof. Stefan Catsicas, Provost, King Abdullah University of Science and Technology (KAUST).**

20:25-20:40 The Khaled Bin Sultan Living Oceans Foundation: Mission and a decade of accomplishments,  
**CAPT Philip G. Renaud, Executive Director, Khaled Bin Sultan Living Oceans Foundation.**

20:40-21:00 Keynote Speech – A Planet in Peril,  
**Prof. Mohamed Faisal, Lead Scientist, Khaled Bin Sultan Living Oceans Foundation and Professor of Aquatic Animal Medicine, College of Veterinary Medicine, Michigan State University.**

21:00-21:20 The Role of Saudi Citizen Initiatives in Preserving the Marine Environment,  
**HRH Prince Khaled Bin Sultan Bin Abdulaziz.**

21:20-21:35 Inauguration of the Saudi Marine Society.

Inauguration of Khaled Bin Sultan Chair of Marine Science.

21:35-22:35 Dinner, (Hyatt Park Hotel) all participants are invited.



## ► Day 2: 09 January 2012

### Session 1: Status of Saudi Arabian Red Sea Coral Reefs

**Co-chairman:** Prof. Mohamed Faisal & Prof. Abdulaziz Abuzinada

09:00-09:20

**Opening Address:** Red Sea coral reefs: The unusual biodiversity and unique environmental setting of Red Sea coral reefs,  
**Dr. Shawn McLaughlin, NOAA, National Ocean Service & Andrew Bruckner, Khaled Bin Sultan Living Oceans Foundation.**

09:20-09:40

The emergence and impacts of coral diseases, bleaching events, and predator outbreaks on Saudi Arabian Red Sea coral reefs,  
**Dr. Andrew Bruckner, Chief Scientist, Khaled Bin Sultan Living Oceans Foundation.**

09:40-10:00

Status of the Saudi Arabian Red Sea coral reef fisheries and challenges for sustainable use,  
**Mr. Hussain H. Alnazry, Ministry of Agriculture, Marine Fisheries Department & Andrew Bruckner, Khaled Bin Sultan Living Oceans Foundation.**

10:00-10:20

Health assessment of Red Sea coral reefs and the role of science in coral reef management,  
**Dr. Fareed Krupp & Mr. Khaled Al-Shaikh, Al-Jubail Marine Sanctuary, Saudi Wildlife Commission (SWC), Saudi Arabia. .**

10:20-10:40

Status and ecology of Sirena, Cetaceans and marine turtles in the Farasan Bank, Red Sea, Saudi Arabia,  
**Dr. Ahmed Mohamed Al Mansi, Saudi Wildlife Commission (SWC), Saudi Arabia.**

10:40-11:00

Coffee Break



## Session 2: Living Oceans Foundation Red Sea Habitat Mapping Program: 2006-2009

**Co-chairman:** Capt. Philip. Renaud & Dr. John McManus

11:05-11:25

**(Opening Address:** An overview of Khaled Bin Sultan Living Oceans Foundation Red Sea research activities,  
**Capt Philip Renaud, Executive Director, Khaled Bin Sultan Living Oceans Foundation.**

11:25-11:45

Innovative use of satellite imagery and field sensors to classify marine habitats of the Saudi Arabian Red Sea coast,  
**Sam Purkis, National Coral Reef Institute (NCRI), Nova South-east University, Florida, USA.**

11:45-12:05

Use of multispectral imagery to drive relationships between reef structure/growth and environmental dynamics, substrate constrains and other controlling factors and processes,  
**Mr. Gwilym Rowlands, National Coral Reef Institute (NCRI), Nova South-eastern University, Florida, USA.**

12:05-12:25

Seafloor mapping: moving from an image to a map,  
**Jeremy Kerr, Living Oceans Foundation Fellow, National Coral Reef Institute, Florida, USA.**

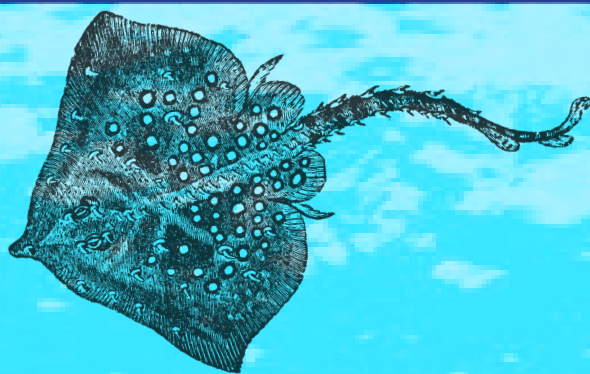
12:25-12:45

Examining potential management and conservation applications of the Living Ocean Foundation's Geographic Information System (GIS) and habitat maps of the Red Sea coast of Saudi Arabia,  
**Dr John McManus, Rosenstiel School of Marine and Atmospheric Science, University of Miami, USA.**

12:45-13:00

Prayer & lunch





### **Session 3: Living Oceans Foundation SCUBA Assessments of Corals, Fishes and Indicators of Coral Reef Resilience**

**Co-chairman: Dr. Andrew Bruckner, Mr. Khaled Al Shaikh**

**14:00-14:20**

**Opening remarks:** Overview of SCUBA survey approaches used in the Saudi Arabian Red Sea: what we did and why?

**Dr. Andrew Bruckner, Chief Scientist, Khaled Bin Sultan Living Oceans Foundation & Mr. Khaled Al Shaikh, SWC, Saudi Arabia.**

**14:20-14:40**

Quantifying population dynamics of stony corals in the Red Sea,  
**Dr. Alasdair Harris, Blue Ventures, United Kingdom.**

**14:40-15:00**

Status of reef fish communities in the Saudi Arabian Red Sea,  
**Brian Beck, Coral Reef Ecologist, Khaled Bin Sultan Living Oceans Foundation.**

**15:00-15:20**

Use of spatial distribution and size structure of reef building corals in the Saudi Arabian Red Sea to forecast future population trends,  
**Dr. Bernhard Riegl, National Coral Reef Institute, USA.**

**15:20-15:40**

Applying resilience to identify management options and enhance conservation,  
**Dr. Andrew Bruckner, Chief Scientist, Khaled Bin Sultan Living Oceans Foundation.**

**15:40-15:55**

Coffee break

**17:00-18:00**

**Tour at KAUST**



# ► Day 3: 10 January 2012

## Session 4: PERSGA Region Papers

|                     |  |
|---------------------|--|
| <b>Co-chairman:</b> | <b>Dr. Ali Al-Aidaros &amp; Mr. Talal Abushusha</b>  |
| 09:00-09:20         | Overview of regional Red Sea protection objectives,<br><b>Prof. Ziad Hamzah Abu-Ghararah, PERSGA Secretary General.</b>  |
| 09:20-09:40         | Status of the Egyptian marine resources of the Red Sea and challenges for sustainable use,<br><b>Dr. Mahmoud Hassan Hanafy, Suez Canal University, Faculty of Science, Marine Science Dept. Ismailia, Egypt.</b>           |
| 09:40-10:00         | Coral reef fisheries in the Red Sea,<br><b>Dr. Ashraf Ibrahim, Suez Canal University, Egypt.</b>   |
| 10:00-10:20         | The Aqaba marine Protected Area, Integration of marine science and resource management in the Gulf of Aqaba, Red Sea,<br><b>Dr. Mohammad Al-Zibdah, Associate Research Professor, Marine Science Station, Jordan.</b>      |
| 10:20-10:35         | Coffee Break   |
| 10:35-10:55         | National Red Sea marine conservation initiatives in Sudan with particular emphasis on coral reefs,<br><b>Dr. Dirar H. Nasr, Red Sea University, Port Sudan, Sudan.</b>   |
| 10:55-11:15         | Impacts to Red Sea coral reefs from coastal development, pollution, shipping, tourism, and other human stressors,<br><b>Dr. Abdul-Mohsen A. Al-Sufiany, Faculty of Marine Sciences, King Abdulaziz University, Jeddah.</b> |
| 11:15-11:35         | Protecting the marine environment in the Kingdom of Saudi Arabia,<br><b>Mr. Talal Abushusha, Fisheries Research Center, Ministry of Agriculture, Saudi Arabia.</b>   |
| 11:35-11:50         | Coffee Break   |

## Session 5: KAUST Contribution to the Symposium Workshop on the impact of Climate Changes on Marine Ecosystems

|                     |  |
|---------------------|--|
| <b>Co-chairman:</b> | <b>Prof. Xabier Irigoyen &amp; Dr. Abdulaziz Al-Suwailem</b>   |
| 11:50-12:10         | Climate to biology in the oceans,<br><b>Prof. Xabier Irigoyen, Director of the Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).</b>  |
| 12:10-12:30         | Global control of regional climate in the Middle East,<br><b>Prof. Georgiy Stenchikov, Chair, Earth Sciences and Engineering Program, Division of Physical Sciences and Engineering, King Abdullah University of Science and Technology (KAUST).</b> |
| 12:30-13:10         | Prayer & lunch   |

## Session 6: Recent KAUST Advances in Coral Reef Ecology

**Co-Chairmen:** Dr. Michael Berumen & Dr. Yassir Abu Alnaja

13:10-13:30

Overview of the coral reef ecology laboratory at KAUST,  
**Prof. Michael Berumen, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).**

13:30-13:50

Functional connectivity of coral reef fishes in a Red Sea tropical seascape,  
**Dr. Kelton McMahon, Joint Postdoctoral Researcher, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST) and Woods Hole Oceanographic Institution (WHOI).**

13:50-14:10

Movement ecology of Red Sea reef fishes,  
**Dr. Elizabeth Tyler, Postdoctoral Researcher, and Mr. Fernando Cagua, PhD Student, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).**

14:10-14:30

Phenotypic and genotypic acclimatization of fungid coral species to different habitats in the central Red Sea,  
**Dr. Cornelia Roder, Postdoctoral Researcher, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).**

14:30-14:50

Coral reproduction in the Red Sea,  
**Ms. Jessica Bouwmeester, PhD student, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).**

14:50-15:10

Chasing whale sharks 24/7 in the Red Sea,  
**Mr. Pedro De La Torre, PhD Student, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST).**

15:10-15:30

Break

**Session 7:** Panel Discussion: Examining potential management and conservation applications of the Living Oceans Foundations Red Sea research program

**Co-Chairmen:** Dr. John McManus & Mr. Omar Al-Khushaim

15:30-15:50

**Chairman's Opening Remarks:**

Application of the Khaled Bin Sultan Living Ocean Foundation coral reef research to support coral reef conservation in Saudi Arabia

**Dr. John McManus, Rosenstiel School of Marine and Atmospheric Science, University of Miami, USA**

15:50-16:30

**Panellist remarks:** Gaps and information needs to enhance conservation,

**Capt Philip Renaud, Bernhard Riegl, Brian Beck, PME, PERSGA, MOA, SWC, KAU & KAUST representatives.**

16:30-17:10

**Panellist remarks:** Future collaboration opportunities of KBSLOF, Dr. Ziad AbuGhararah (PERSGA), Dr. Sameer Ghazi (PME), Mr. Omar Khushaim (SWC), Mr. Talal Abushusha (MOA).

17:10-17:30

Break

17:30-18:00

**Symposium conclusions**

Symposium conclusions and recommendations,

**Capt Philip Renaud**

18:00-18:20

Closing remarks

**Prof. Abdulaziz Abuzinada.**