



THE  
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# Minimizing and Addressing Ocean Acidification

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[www.iaea.org/environmentlaboratories](http://www.iaea.org/environmentlaboratories)



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Precision:  
the key  
to  
perfect time!





# Isotopes are precision tools to:

- **Study environmental processes in time and space;**
- **Contribute to climate change studies;**
- **Study pollution and identify polluters; and**
- **Conduct ecological studies and assessments.**



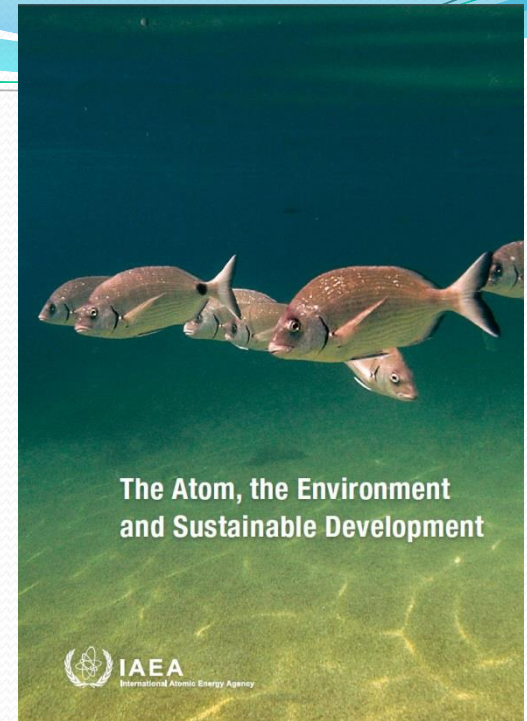


**Nuclear Science**

**Precision Science**

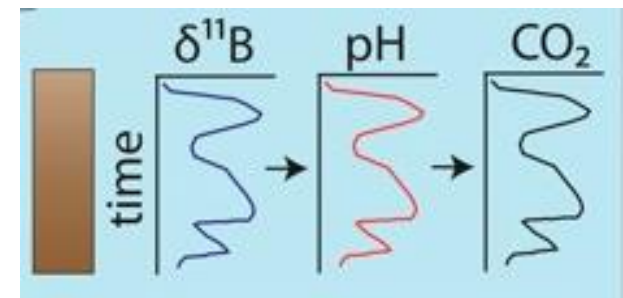
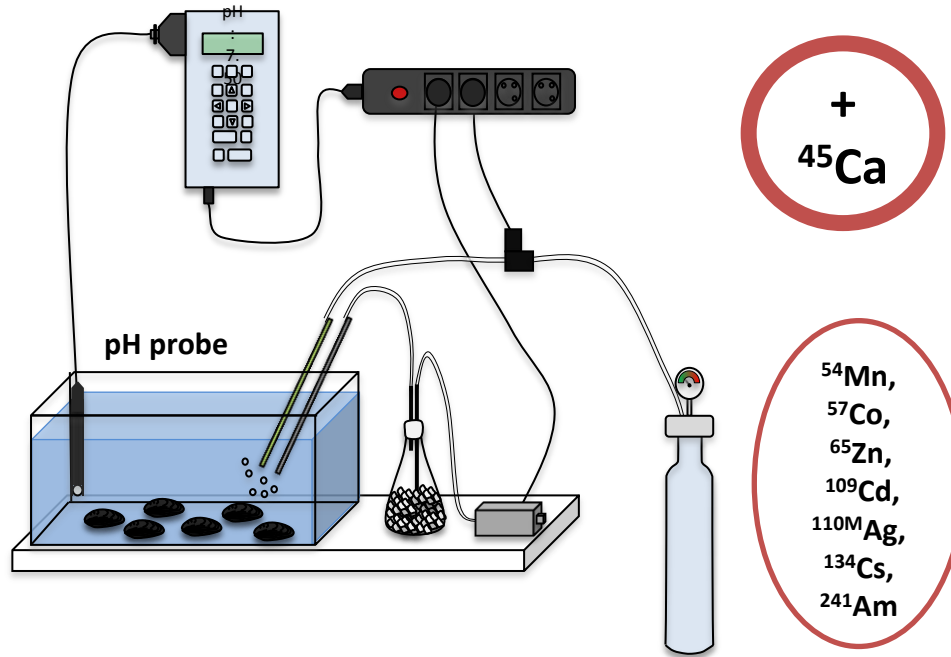
**Better Environmental Management**

**Sustainable Development**



# Isotopes are powerful tools to study climate-related changes and ocean acidification

Use of radiotracers to study impact of OA on biological processes, e.g. calcification





# Ocean Acidification - International Coordination Centre

## SCIENCE



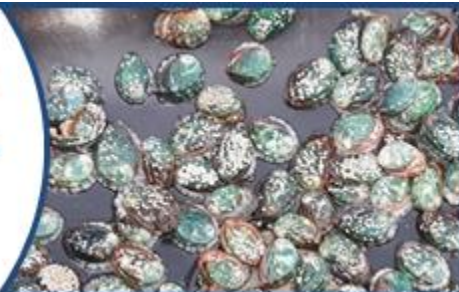
## TRAINING



## OUTREACH

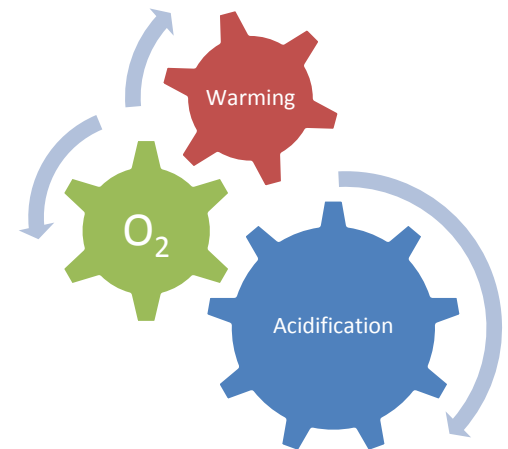


Ocean Acidification  
International  
Coordination Centre  
**OA-ICC**



# What is the science telling us?

- The changes are not linear, but the overall trend is of significant concern.
- Coral reefs are particularly susceptible, especially when OA is combined with other stressors such as warming or pollution.
- It's not all doom and gloom – OA can increase primary productivity.
- Wait, never mind
- We don't know what we don't know





# What must be done?



- Collaborative responses – fill scientific, legal & institutional gaps.
- Identify suitable physical, chemical and biological responses.
- Preserve biological resilience by reducing stressors.
- Diversify coastal industry to enhance economic resilience
- Invest in more science at local and global scales

# Bridging the Gap



TO ADDRESS THE  
BIG CHALLENGES  
WE MUST START SMALL



*60 Years*

*Atoms for Peace and Development*