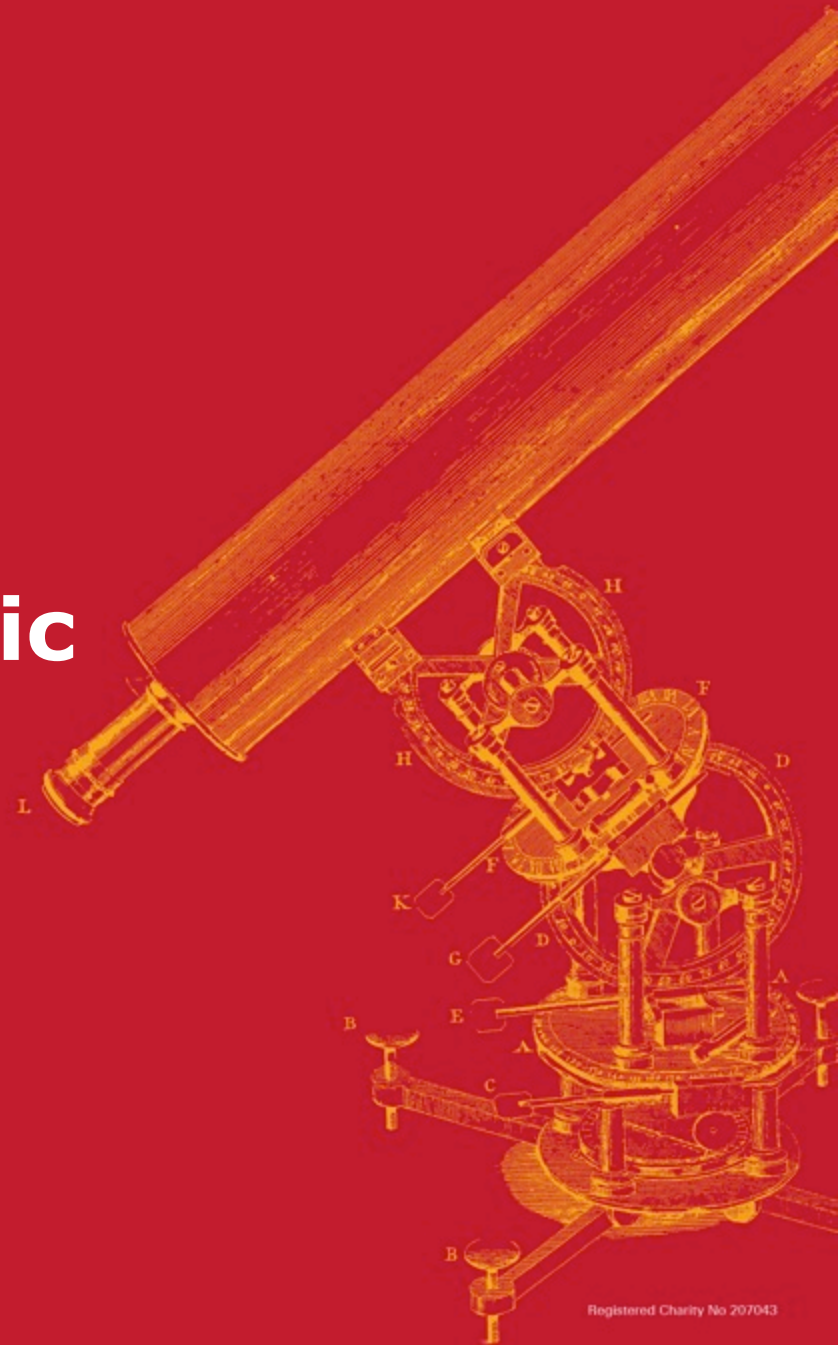


International Scientific Collaboration

FAPESP week, 26 September 2013

Martyn Poliakoff
Foreign Secretary

THE
ROYAL
SOCIETY





Science is increasingly global

“ The scientific world is becoming increasingly interconnected, with international collaboration on the rise [..]over 35% of articles published in international journals are internationally collaborative, up from 25% 15 years ago” – Royal Society (2011). Knowledge, networks and nations

“ Increasing globalization is the most prominent feature of science and innovation in the early 21st century” – Thomson Reuters

The Royal Society and international collaboration

- Philip Zollman, Foreign Secretary of Royal Society in 1723, ~60 years before British Government appointed first Secretary of State for Foreign Affairs
- Foreign Secretary's Role
 - "to enjoy mutual intelligence and affairs with all manner of strangers and foreigners"*

1663 Charter

**There are now
more mobile
phones in the
world than
toothbrushes!**



June 2012



RIO+20
United Nations
Conference on
Sustainable
Development

A major report from the Royal Society

People and
the planet

April 2012



THE ROYAL SOCIETY

People and the Planet

- Population & Consumption cannot be treated as separate issues
- **Earth's capacity to meet our needs is finite**
- Developed & emerging nations currently consume more than is sustainable
- **The 1.3 billion poorest people need to consume more**

The 'Robin Hood' Question

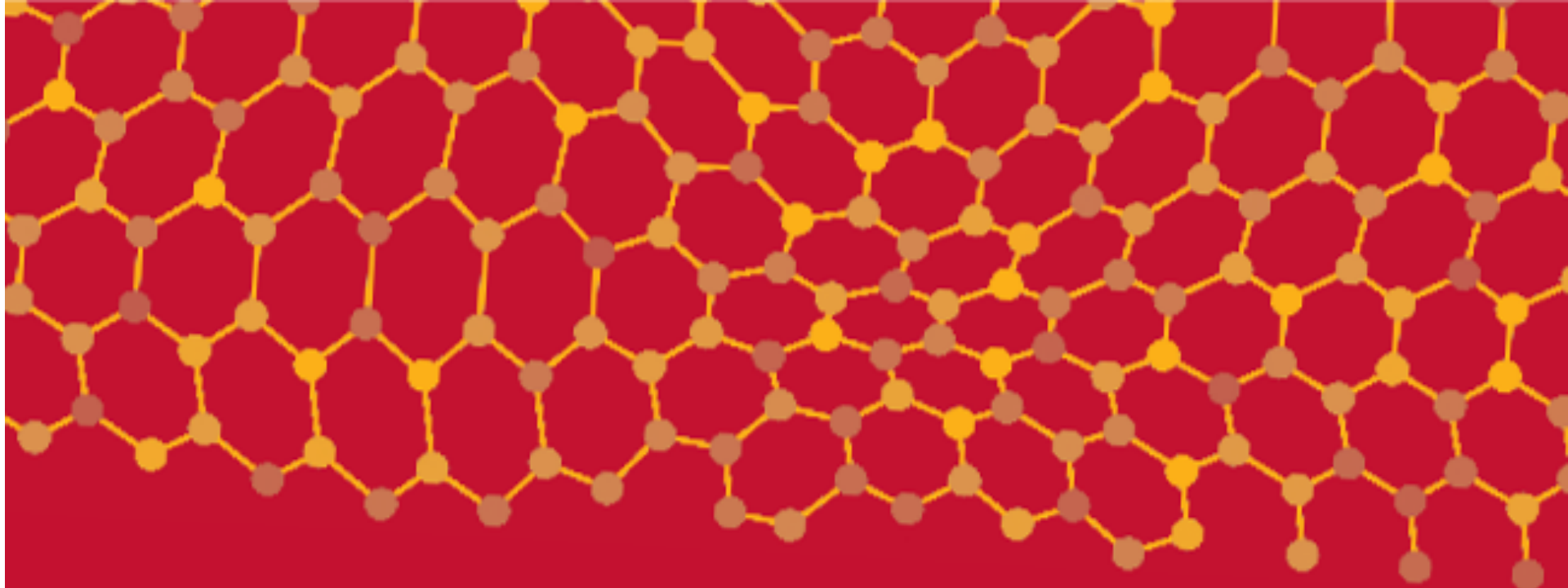
Can we provide more for the poor
without robbing the rich?

A big opportunity for Green Chemistry

Use our resources more efficiently;

make more product

from the same amount of feedstock



Knowledge, networks and nations

Global scientific collaboration in the 21st century

EXCELLENCE
IN SCIENCE



THE ROYAL SOCIETY

Global collaboration

Figure 2.6c. **Collaboration between Brazil, Russia, India and China and the G7 1996–2000.**

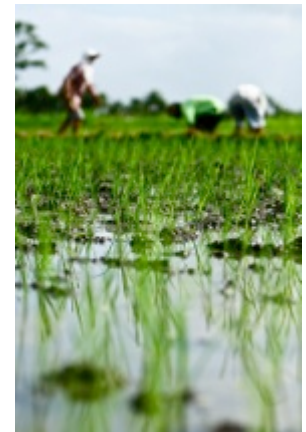
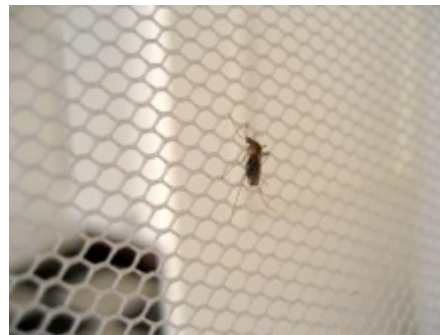


Figure 2.6d. **Collaboration between Brazil, Russia, India and China and the G7 2004–2008.**¹⁷⁹



Advantages of International Collaboration

- **Quality** – *working with the best wherever they are*
 - Collaborative research is more highly cited
- **Efficiency** – *collaboration enables economies of scale*
 - The scope of certain projects is too great for any one nation
Large Hadron Collider, International Space Station
 - Distribution of research tasks on large, decentralised initiatives
Human Genome Project
- **Necessity** – *global problems require international cooperation*
 - climate change, food security, sustainable energy, infectious diseases



International collaboration helps capacity building

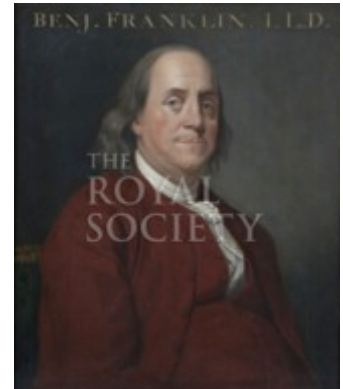
- International capacity building is crucial to ensure the **impacts of scientific research** are shared globally
 - *Developing countries* gain access to facilities, funding, equipment and networks
 - *Overseas partners* gain access to unique geographical resources



*The African Academies at the Royal Society
Oct 2011*

Diplomatic and geopolitical imperatives

- Royal Society and its Fellows have a proud history in supporting 'science for diplomacy':
- **Benjamin Franklin** – ensured protection for Captain Cook's voyages during American revolution
- **Joseph Banks** - Continued UK/France scientific collaboration during Napoleonic wars
- UK/US/North Korean collaboration on **Mt Paektu, 2013**
- **SESAME** project based in Jordan



UK-Brazil Frontiers of Science Meeting

Itatiba, São Paulo, 27-30 August 2010




THE ROYAL SOCIETY



Next meeting February 2014 in the UK



www.periodicvideos.com



Hi, welcome to Brazil.
I am Luis Roberto Brudna

Universidade Federal do Pampa, *Bagé*

www.periodicvideos.com



Quimicamente o talco é derivado de
silicato de magnésio

Final Thoughts

- Collaborate with people whose skills are different from yours
- Exploit differences in national education
- Do things together that you would not normally do
- Never collaborate with someone you do not like!

To find out more, visit
royalsociety.org

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