

SCIENCE AND CULTURE

JULY-AUGUST 2011/VOLUME 77/NOS. 7-8

A JOURNAL OF NATURAL AND CULTURAL SCIENCES

PUBLISHED BY THE
**INDIAN SCIENCE
NEWS ASSOCIATION**

EDITORIAL BOARD

S. C. Roy Editor-in-Chief

Samarjit Kar Editorial Advisor

N. D. Paria Associate Editor

Parimal Chandra Sen Associate Editor

Syamal Chakrabarti

Barun Kumar Chatterjee

N. C. Datta

Amit Krishna De

Vinod Kumar Gupta

Sudhendu Mandal

COLLABORATORS

S. Aditya (Kolkata)	A. K. Hati (Kolkata)
Amiya Bagchi (Kolkata)	S. Kailas (Mumbai)
D. Balasubramanian (Hyderabad)	Ananta Krishnan (Pune)
Biman Basu (Delhi)	Abhijit Lahiri (Delhi)
Indrani Bose (Kolkata)	R. C. Mohanty (Bhubaneswar)
Sankar Chakravorti (Kolkata)	S. P. Mukherjee (Kolkata)
R. N. Chatterjee (Kolkata)	B. K. Pattnaik (Kanpur)
D. P. Chattopadhyay (Kolkata)	V. Prakash (Mysore)
R. Gadagkar (Bangalore)	G. Prathap (Delhi)
Irfan Habib (Delhi)	R. R. Rao (Bangalore)
E. Haribabu (Hyderabad)	Ashoke Sen (Allahabad)
	S. P. Sengupta (Kolkata)
	P. Tandon (Shillong)

EDITORIAL

Power to the People
— S. C. Roy ... 243

ARTICLE

Nehru's Scientific Temper Recalled
— Jairam Ramesh ... 246

India's Union Budget : Changing Scope and
the Evolving Content
— Rajeev Malhotra ... 252

Teaching Mathematics with a Different
Philosophy -I : Formal Mathematics as
Biased Metaphysics
— C. K. Raju ... 274

Teaching Mathematics with a Different
Philosophy-II : Calculus without Limits
— C. K. Raju ... 280

Philosophy of Space, Time and Motion
— Nirendra Mohan Ganguli ... 286

OPINION

Indiscriminate Plantation of *Jatropha curcus* in
India is a Harmful Practice from an Ecological
View Point in Long Run
— Arvind Singh ... 297

INNER SPACE

Current Wars
— IncogRito ... 301

Contd. next page.



Indian Science News Association

President

Prof. B. B. Biswas

Vice-Presidents

Professor M. S. Swaminathan

Professor P. K. Ray

Professor Sankar Kumar Pal

Professor Alok Krishna Gupta

Professor Sibaji Raha

Professor S. K. Talapatra

Honorary Secretaries

Professor N. C. Datta

Professor Sudhendu Mandal

Honorary Treasurer

Professor Amalendu Bandyopadhyay

Council Members

Professor (Mrs.) Julie Banerji

Professor Kankan Bhattacharyya

Dr. Satyabrata Chakrabarti

Professor Manas Chakrabarty

Professor Dhruvajyoti Chattopadhyay

Dr. Manas Pratim Das

Dr. Dibyendu Ganguli

Dr. Balaram Majumder

Dr. Hemanta Kumar Majumder

Dr. Sisir Kumar Majumder

Professor Indranil Manna

Professor Biswapati Mukherjee

Dr. Gopeswar Mukherjee

Professor A. K. Pattanayak

Professor Siddhartha Ray

Dr. Amal Roy Chowdhury

Professor Milan K. Sanyal

**Members of the Editorial Board are also
members of the Council**

RESEARCH COMMUNICATION

Growth and Biomass as Influenced by Different Nutritional Treatments in *Withania somnifera* (Ashwagandha), an Important Medicinal Plant of the Indian Arid Zone

—Asha Swami, Pawan K Kasera and
Sher Mohammed

... 303

Some Aspects of Stored Wheat Seeds with Respect to Seedborne Species of *Alternaria Aspergillus*, *Fusarium* and *Penicillium* at Gorkhpur

— Asha Swami, Rekha Srivastava and
N. Misra

... 308

A Socio-economic Study on Women's Scientific Temper in Bengal with Special Reference to Nutritional Concept

— Soma Basu

... 313

Solar Powered White LEDs an Improved Eco-design and Eco-efficient Lighting Product

— Asit Kumar Ghosh

... 318

Role of Potentially Important Microbes in Bioremediation

— Aryadeep Roy Choudhury and
Sreeparna Pradhan

... 324

BOOK REVIEW

A Masterful Spirit : Homi J Bhabha 1909-1966

— Atri Mukhopadhyay

... 331

NOTES AND NEWS

... 337

Cover : Picture taken from
www.robertstrongmarketing.org with a request to
reprint *ex-gratiss*

**Members of the Advisory Committee
of
Indian Science News Association**

Professor Padmanabham Balaram	Bangalore
Professor D. Balasubramanian	Hyderabad
Professor Basudeb Barman	Kolkata
Professor A. K. Barua	Kolkata
Professor Ashok Nath Basu	Kolkata
Dr. M. K. Bhan	New Delhi
Professor Jagadish Chandra Bhattacharyya	Bangalore
Professor Samir Kumar Brahmachari	New Delhi
Professor Chandrashekhar Chakraborty	Kolkata
Dr. Purnendu Chatterjee	Kolkata
Professor Suranjan Das	Kolkata
Professor Asis Datta	New Delhi
Professor P. N. Ghosh	Kolkata
Dr. N. K. Ganguly	New Delhi
Professor S. N. Ghosh	Kolkata
Dr. H. K. Gupta	Hyderabad
Dr. K. Kasturirangan	Bangalore
Dr. R. A. Mashelkar	New Delhi
Dr. Govardhan Mehta	Bangalore
Professor M. G. K. Menon	New Delhi
Professor Yash Pal	New Delhi
Dr. T. Ramasami	New Delhi
Dr. Anuj Sinha	New Delhi
Dr. Bikash Chandra Sinha	Kolkata

**SCIENCE & CULTURE
ADVERTISEMENT
RATE**

	Single Insertion	
	(Full Page)	(Half Page)
COVER (Back)	Rs. 10,000/-	×
COVER (Front Inside)	Rs. 7,000/-	×
COVER (Back Inside)	Rs. 7,000/-	×
OTHER PAGES	Rs. 5,000/-	Rs. 3,000/-

N.B. : For colour or any other special types of advertisement—rates may be negotiated.

A discount of 20% for insertions in all issues in a year and of 15% for atleast three insertions will be allowed.

TO OUR READERS

Your appreciation of the journal makes us bold to suppose that some of your friends would also like to read **SCIENCE & CULTURE**, the premier scientific monthly of India devoted to the publication of the progress in pure and applied sciences. The Indian Science News Association has been conducting the journal for over 76 years with the editorial co-operation of eminent scientists of India with the object of promoting and diffusing knowledge laying special stress on the progress of scientific studies here and abroad, and advocating methodical application of science to problems of national regeneration.

Editorial correspondence should be sent to the Editor-in-Chief, *Science and Culture*, 92, Acharya Prafulla Chandra Road, Kolkata : 700 009. Manuscripts prepared in accordance with the Instruction to Contributors should be submitted in **Triplicate** and will not be returned unless accompanied with return postage.

Correspondence relating to subscription, advertisement and other matters should be addressed to the **Hony. Secretary, Indian Science News Association, 92, Acharya Prafulla Chandra Road, Kolkata : 700 009, Phone : 2350-2224. E-mail : scie2224@dataone.in, Website : www.scienceandculture-isna.org**

MEMBERSHIP FEE

Life Member	:	Rs. 2500.00
Ordinary Member (without journal)	Rs.	100.00
Ordinary Member (with journal)	Rs.	400.00

ANNUAL SUBSCRIPTION

Inland (Institution)	Rs.	1500.00
Foreign	U.S.\$	125.00
Inland (Individual)	Rs.	400.00
Foreign (Individual)	US.\$	60.00
Single Copy (Inland)	Rs.	80.00
Single Copy (Foreign)	\$	20.00

Past Special Issues

- **Glass and Ceramic Research in India** (May-June 2005)
- **Water Resources in South Asia : An Assessment of Climate Change – Associated Vulnerabilities and Coping Mechanisms** (July-August 2005)
- **Unconventional Applications of Physics** (March-April 2007)
- **Current Trends in Leishmania Research** (May-June 2007)
- **Forensic Science in Criminal Justice Delivery System** (November-December 2007)
- **Natural Products Chemistry** (January-February 2008)
- **Mysteries of the Earth's Interior** (May-June 2008)
- **Radio Science** (September-October 2008)
- **Scientific Legacy of Acharya J. C. Bose The Doyen of Indian Science** (November-December 2008)
- **Origin of Species–A Revolutionary Argument** (March-April 2009)
- **Geomagnetism and Aeronomy** (July-August 2009)
- **Cholera : A Disease that Eludes Technological Advance** (May-June 2010)
- **Fifteen years of Econophysics Research** (September-October 2010)
- **Emerging Trends in Genomics : Applications in Health and Disease** (January February-2011)