

## Orissa Environmental Society

ND-4, VIP Area, IRC Village, Bhubaneswar - 15

Website: [www.orissaenvironment.com](http://www.orissaenvironment.com)

E-mail: [oesbbsr@gmail.com](mailto:oesbbsr@gmail.com)

The Orissa Environmental Society was founded in 1982 with the prime objective of promoting awareness towards protection of the fast-deteriorating environment and conservation of the depleting natural resources of the State by way of undertaking diverse activities. It has been preaching the principles of sustainability based on ecologically, economically and socially sound practices. In recognition of the services rendered by it, the Society has been represented in various state and national level committees and forums, such as State Wildlife Board, Similipal Biosphere Reserve Committee and National Environment Awareness Campaign Screening Committee. The Society has made landmark contributions in respect of Similipal Biosphere Reserve, Chilika lagoon, Mahendragiri hill terrain and Angul-Talcher industrial area, to name the prime areas, by way of research, education and awareness promotion. It has published a series of books on diverse environmental issues confronting the humanity. The Society, with more than 500 life members on its roll, has the unique distinction of enjoying the accreditation of some national and international organizations. It played the pivotal role in the opening of the Bhubaneswar Chapter of ISCA.

### Programme Schedule

#### Day 1 (October 18, 2012 - Thursday)

08:30 am - 10:00 am	Registration
10:00 am - 11:30 am	Inaugural Function
11:30 am - 11:40 pm	Tea Break
11:40 pm - 12:30 pm	Keynote Address on 'Science for Shaping the Future of India'
12:30 pm - 01:15 pm	Invited Lecture - I
01:15 pm - 02:00 pm	Lunch Break
02:15 pm - 04:00 pm	Technical Sessions - I, II, III
04:00 pm - 04:10 pm	Tea Break
04:10 pm - 06:00 pm	Technical Sessions - I, II, III (to continue)

#### Day 2 (October 19, 2012 - Friday)

10:00 am - 11:30 am	Panel Discussion
11:30 am - 11:45 am	Tea Break
11:45 am - 12:30 pm	Invited Lecture - II
12:30 pm - 01:20 pm	Invited Lecture - III
01:20 pm - 02:10 pm	Lunch
02:10 pm - 03:00 pm	Poster Session
03:00 pm - 03:45 pm	Invited Lecture - IV
03:45 pm - 05:15 pm	Valedictory Function
05:15 pm - 06:00 pm	General Body Meeting of ISCABC

### General Correspondence

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## Organizing Committee

### Chairman & Patron

**Prof. Prasant Kumar Sahoo**, Vice-Chancellor, Utkal University

### Members

**Prof. Prem P Singh**, Head, Dept. of Geology, UU - Convener  
**Dr. Jaya Krushna Panigrahi**, Convener, ISCABC - Co-Convener  
**Dr. S N Patro**, Working President, OES  
**Dr. C R Mishra**, Treasurer, ISCA: Bhubaneswar Chapter  
**Ar. H N Dash**, Reader, CET, BPUT  
**Prof. P K Sahoo**, Head, Dept. of Chemistry, UU  
**Prof N C Mishra**, Head, Dept. of Physics, UU  
**Prof. P K Mohanty**, Head, Dept. of Zoology, UU  
**Prof (Mrs) S Sahoo**, Head, Dept. of Botany, UU  
**Dr. J Dandapat**, Head, Dept. of Biotechnology, UU  
**Dr. K M Sethi**, Head, Dept. of Geography, UU  
**Dr. (Mrs) S Dutta**, Head, Dept. of Mathematics, UU  
**Dr. K B Panda**, Head, Dept. of Statistics, UU  
**Prof. (Mrs) R Mohanty**, Head, Dept. of Anthropology, UU  
**Dr. P K Rath**, Head, Dept. of Psychology, UU  
**Prof. S Jena**, Prof. R & D, UU  
**Prof. H K Sahoo**, Dept. of Geology, UU  
**Prof (Mrs) M Das**, Dept. of Geology, UU  
**Prof P Behera**, Dept. of Geology, UU  
**Prof. R N Hota**, Dept. of Geology, UU  
**Dr. D S Pattnaik**, Dept. of Geology, UU  
**Dr. B K Ratha**, Dept. of Geology, UU  
**Dr. D Beura**, Dept. of Geology, UU  
**Mr. K Mallick**, Dept. of Geology, UU  
**Dr. Rekha Das**, HoD of Zoology, GM (A) College  
**Dr. B M Faruque**, former Director, GSI  
**Mr. Pravakar Rout**, Vice-President, OES  
**Mr. Jiban Mohapatra**, Chief Manager (Env.), Nalco  
**Dr. Bibhudutta Mishra**, Scientist, CIFA  
**Mr. N R Acharya**, Director, TRUST

### Advisory Committee

**Prof. Satyananda Acharya**, Former Vice-Chancellor, UU  
**Prof. Madhab Chandra Dash**, Former Vice-Chancellor, SU  
**Prof. N K Mahalik**, Former Professor, Dept. of Geology, UU

## Indian Science Congress Association

### Headquarters

14, Dr. Biresh Guha Street, Kolkata - 700017

Website: [www.sciencecongress.nic.in](http://www.sciencecongress.nic.in)

### Key Office Bearers of ISCA

*General President, 100<sup>th</sup> ISC*

**Dr. Manmohan Singh**, Hon'ble Prime Minister of India

*General Secretary (Membership Affairs)*

**Dr. Manoj Kr. Chakrabarti**, Dy. Dir. & Head, Div. of Pathophysiology,  
NICED (ICMR), Kolkata

*General Secretary (Scientific Activities)*

**Dr. Vijay Laxmi Saxena**, Head, Dept. of Zoology, Dayanand Girls' PG College  
(CSJM Univ.), Civil Lines, Kanpur

*Treasurer*

**Mr. NB Basu**, CME (P & D), The Kolkata Municipal Corporation, Kolkata  
*Contact Person*

**Dr. Amit K. De**, Executive Secretary, ISCA

## National Conference on 'Science for Shaping the Future of India'



Organized by

**Indian Science Congress Association  
Bhubaneswar Chapter**

On the Occasion of the

**15<sup>th</sup> Odisha Bigyan Congress**

**Dates: October 18-19, 2012**



### Host Organization



**Department of Geology  
Utkal University, Bhubaneswar**

### Collaborator



**Orissa Environmental Society  
Bhubaneswar**

## Background

The Indian Science Congress Association (ISCA), the premier organization of the scientists of the country, has been working towards the advancement and promotion of the cause of Science. It has been organizing an annual congress of the scientists, named Indian Science Congress (ISC), since 1914 and the current celebration of the Centenary Year of ISCA will culminate in holding of the 100<sup>th</sup> ISC at Calcutta University, Kolkata through 3-7 Jan, 2013. Consonant with this, the Bhubaneswar Chapter of ISCA is organizing a two-day national conference, in addition to other programmes, on October 18-19, 2012 on the theme of the 100<sup>th</sup> ISC, 'Science for Shaping the Future of India'. The conference is being hosted by the Department of Geology of Utkal University on the occasion of the 15<sup>th</sup> Orissa Bigyan Congress to bring to a common platform the scientists, academics, engineers, technologists and science-lovers of the State as well as from different corners of India for sharing their experiences and innovations. The Orissa Environmental Society is collaborating the Conference. (For details of information on 100<sup>th</sup> ISC please visit the website of ISCA, [www.sciencecongress.nic.in](http://www.sciencecongress.nic.in)).

## Focal Theme

The dream of India being incorporated into the league of developed countries of the world is progressively transforming into reality, and the country is all poised to embrace science and its applied instrument, technology, as the befitting tool to strengthen its initiatives for achieving holistic development. With its eminence in science since ancient times, more specifically in the domains of mathematics, astronomy and medicine, India is aware of the imperative use of science and technology (S & T) in nation building at this juncture of time. Sowing the seeds of a new generation scientific revolution and construing science as an investment for accelerated economic growth have to be incorporated at the top of our governance agenda. Our endeavour for superior quality and indigenous S & T capabilities, aimed at addressing the most crucial issues of the society and realizing the Millennium Development Goals, should be integrated into our policies as national priority.

The future India has to ensure its people living at the bottom of social strata food security by reducing hunger and poverty, access to drinking water and sanitation, basic health services and reduced child mortality, and preparedness for combating climate change and other natural and humanitarian disasters by effective programme implementation. For shaping the future of the country in the direction of prosperity and progress, academic and research institutions in science have to enhance their quality to match with international standards and bring about novel innovations for equitable social development. Our research programmes need to achieve a range of out-of-the-box solutions, such as space research to prepare hydro-geomorphological maps for locating groundwater sources, agricultural research to make sure sustainable farming, DNA based diagnostic methods to arrest child mortality, satellite data to locate

potential fishing zones, early warning systems to prepare people for facing cyclones, biotechnology to combat pollution menace and energy research to have a breakthrough on low cost fuel cells and photovoltaics for de-centralised power supply. A robust scientific paradigm that makes efficient use of the available resources of the country to elevate it to a new echelon of excellence is the need of the hour. Keeping this in view, the present conference would deliberate on the focal theme '**Science for Shaping the Future of India**' for the benefit of the scientific community.

## Call for Papers

Research papers from all branches of science and technology are invited for oral/ poster presentation in the technical sessions of the conference. The selected abstracts will be published in the proceedings of the Conference. Hard copies of extended abstracts (within 500 words) may be submitted along with a soft copy (CD) to the Convener, ISCA Bhubaneswar Chapter latest by October 10, 2012. The soft copy may also be sent to the e-mail ID [jk.panigrahi@gmail.com](mailto:jk.panigrahi@gmail.com). Best presentations (oral/poster) will be awarded in the Conference. The registration fee must accompany the submitted abstract.

## Technical Sessions

Biological Sciences – I	(Animal, Plant, Medical Sciences, etc.)
Physical Sciences – II	(Physics, Chemistry, Mathematics, etc.)
Technological Sciences – III	(Engineering, Technology and Applied Sciences)

## Registration Fee

Delegates : Rs. 300/- ; Student Delegates: Rs. 200/-  
(Payment details are in the Registration Form)

## Accommodation

Delegates are requested to make their own arrangements for their stay in Bhubaneswar during the Conference. However, limited accommodation can be made for persons coming from outside the State.

## Indian Science Congress Association Bhubaneswar Chapter

Website: [www.iscabc.org](http://www.iscabc.org)  
Email: [iscabc@rediffmail.com](mailto:iscabc@rediffmail.com)

One of the focal objectives of ISCA, the premier and the oldest scientific organization of the country working since 1914, has been to promote scientific temper among young scholars as well as innovative scientists, and to encourage them to participate in various programmes relevant to fundamental, experimental and operational activities aimed at human welfare. Keeping this in view, the ISCA initiated opening of Regional Chapters since 1986-87 at various places in the country. The Bhubaneswar Chapter was launched in 1996 and since 1997 it has been holding regularly one annual meet of scientists

and academics, the 'Odisha Bigyan Congress (OBC)', at different places in the state of Odisha. Besides, the Chapter also undertakes a series of programmes on various occasions to inculcate scientific attitude and generate scientific awareness in the minds of students as well as people in general. The Chapter felicitates senior scientists and academics of Odisha on the occasion of the OBC for their lifetime contributions to the fields of science and technology. For the membership of ISCA, one may apply to the headquarters at Kolkata through the Bhubaneswar Chapter. A member of ISCA automatically remains a member of its Bhubaneswar Chapter.

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**Utkal University, Bhubaneswar**  
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## A Profile of the University

Utkal University, established in the year 1943, is the seventeenth oldest University in India and is the largest affiliating University of the country having 338 affiliating general colleges, including autonomous, professional, law and medical colleges. Presently, it has under its fold 27 post-graduate departments, 15 sponsored courses and three UGC sponsored innovative programmes. The major objective of the University has been diffusion and dissemination of knowledge, creating knowledge workers and building a knowledge resource base. It strives to enhance the capacity of its stakeholders focusing on inclusive growth. One of the University's key development goals has been to establish itself as a Centre of Excellence and Lead Centre in teaching, research and consultancy.

## Department of Geology at a Glance

The Department of Geology of Utkal University occupies a unique position of honour, distinction and glory in being the first Post Graduate faculty of the University dating back to the year 1954. The alumni of this Department have occupied various prestigious and responsible positions in several government, private and public sector organizations in India and abroad. The Department imparts M Sc, M Phil and Ph D courses with intake capacities of 50, 08 and 15 respectively. It has received financial assistance from UGC (DRS-I), FIST (DST) and Purse Grant from DST for teaching and research. Its faculty members have earned distinction being associated with different national and international committees, members of editorial boards and members of IGCP (International Geological Correlation Programme). Faculty members are regularly presenting papers in international and national conferences, and visiting various universities and research institutes all over the world. Presently, collaborative research is being carried out with IMMT, Bhubaneswar; University of Jammu; Aligarh Muslim University; ONGC; Reliance Industries Ltd and Osaka City University, Japan. Faculty members are also undertaking currently 03 research projects with assistance from UGC and DST.