

NATIONAL CONFERENCE ON FUTURE INDIA: SCIENCE AND TECHNOLOGY



City College, Kolkata-700009



Indian Science Congress Association
Kolkata Chapter



NATURE OF WORK: National Level Conferences on Science and Technology with an aim to promote scientific knowledge and awareness amongst young generation and to provide a common platform for the exchange of ideas on diverse areas of science.

DATE: 27-28th February, 2019

ORGANIZERS: City College, Kolkata-700009, Indian Science Congress Association, Kolkata Chapter

Venue: City College 102/1, Raja Rammohan Sarani, Kolkata – 700 009, West Bengal,
India

NO. OF PARTICIPANTS:

**NATIONAL CONFERENCE ON "FUTURE INDIA - SCIENCE & TECHNOLOGY
CITY COLLEGE & ISCA, KOLKATA CHAPTER**

CONFERENCE ORGANIZING COMMITTEE

Chief Patron: Dr. Mukul Kanti Manna, President, Governing Body, City College
Chairperson : Dr. Sitalprasad Chattopadhyay, Principal, City College
Joint Organizing secretaries: Dr. Tapan Kumar Ghosh, Dr. Korak Kanti Chaki

NATIONAL ADVISORY COMMITTEE

Dr. Ashok K Saxena, Member, Executive Council, ISCA; and Former GP , ISCA
Dr. Manoj K Chakrabarti, General President, ISCA
Prof. K. S. Rangappa, General President-Elect 2019-20 & Member of Executive Committee, ISCA
Dr. (Mrs) Vijay Laxmi Saxena, General President-Elect 2020-21, Member of Executive Committee, ISCA
Prof. P. P. Mathur, General Secretary (Scientific Activities), ISCA
Prof. Gangadhar, General Secretary (Membership Affairs), ISCA
Prof. Ranjit K Verma, Treasurer, ISCA
Dr. Nibedita Chakrabarti, Member, Executive Council, ISCA
Prof. Tushar Kanti Ghosh, Convener, ISCA Kolkata Chapter
Prof. Ananga M Chandra, Treasurer, ISCA Kolkata Chapter
Dr. Prasanta Mahato, Ex-Principal, N. D. College
Dr. Arpita Chandra (Banerjee), Scientist, Cancer Research Institute, Kolkata
Dr. Pranati Sinha, Assoc. Prof. Vidyasagar Evening College

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Prof. Arkajo Majumdar
Members : Dr. Mitali Midya
Dr. Biswajit Panda
Dr. Kausik Mukhopadhyay
Dr. Sudipta Patra
Dr. Indranil Roy
Prof. Joyjeet Majumder

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Dr. Syamsunder Dhara
Members: Dr. Anshuman Nandy
Dr. Somdeb Chakraborty
Dr. Pampa Guha
Prof. Dona Banerjee
Prof. Soumen Roy

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Prof. Masiur Rahman Sardar
Dr. Pallab Sarkar
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Dr. Debasish Karmakar
Members: Dr. Mita Mondal
Dr. Swades De
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Mr. Subrata Das
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Mr. Pintu Hazra

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Dr. Samapti Pal
Dr. Rita Chanda
Dr. Nandini Chakrabarti
Mr. Anup Maiti
Mr. Rajpat Ram

CITY COLLEGE
National Conference on "Future India: Science and Technology" 27th & 28th February, 2019
PROGRAMME

Day 1(WEDNESDAY): February 27, 2019			
9.00 AM to 10.30 AM	REGISTRATION: FRONT DESK		
10.00 AM to 11.15 AM	INAUGURAL SESSION (CENTENARY AUDITORIUM)		
	<ol style="list-style-type: none"> 1. Inauguration of the conference: Opening song, Lamp lighting 2. Welcome Address by <i>Dr. Sital Prasad Chattopadhyay</i>, Principal, City College 3. Felicitation of GUESTS by the host college 4. Felicitation of <i>Dr. (Mrs) Vijay Laxmi Saxena</i> by ISCA 5. Unfolding of the conference theme by Convenor, ISCA, Kolkata Chapter 6. Speech by Chief Guest: <i>Dr. (Mrs.) Vijay Laxmi Saxena</i>, General President-Elect, 2020-2021 7. Release of Abstract Book by <i>Dr. Ashok Kumar Saxena</i> and <i>Dr. Mukul Kanti Manna</i> 8. Speech by Special Guest: <i>Prof. Gangadhar</i>, General Secretary (Membership Affairs), ISCA 9. Speech by <i>Dr. Manoj K Chakrabarti</i>, General President, ISCA 10. Speech by <i>Dr. Mukul Kanti Manna</i>, President, Governing Body, City College 11. Vote of Thanks by Jt. Secretaries 		
11.15 AM	TEA BREAK		
11.30 AM to 12.30 PM	ISCA Jawaharlal Nehru Birth Centenary Award Lecture (CENTENARY AUDITORIUM) CHAIRPERSON: <i>Prof. Manoj K Chakrabarti</i> SPEAKERS: <i>Prof. Dilip Mahalanobis</i> 2. <i>Prof. Ashish S Verma</i>		
12.30 PM to 1.45 PM	PLENARY SESSION (CENTENARY AUDITORIUM) CHAIRPERSON: <i>Prof. Tushar Kanti Ghosh</i> SPEAKERS: 1. <i>Prof. Dhrubajyoti Chattopadhyay</i> 2. <i>Dr. Abhijit Majumdar</i>		
01.45 PM	LUNCH		
02.30 PM to 04.00 PM	Scientific Session A (Oral Presentation) DARWIN HALL Medical/Veterinary & Pharmaceutical Sciences	Scientific Session B (Oral Presentation) EINSTEIN HALL (i) Mathematical Sciences and Computer Sciences (ii) Physical Sciences & Engineering & Technology	
	Jt. Chairpersons: <i>Prof. Manoj K Chakrabarti</i> & <i>Dr. Arpita Chandra (Banerjee)</i>	Chairperson (i): <i>Prof B C Chakraborty</i> Chairperson(ii): <i>Prof. Salil Biswas</i>	
4.00	TEA BREAK		
04.15 PM to 5.30 PM	POSTER SESSION CHAIRPERSONS: <i>Prof. Manoj K Chakrabarti</i> & <i>Dr. Abhijit Majumdar</i>		
DAY 2 (THURSDAY) : FEBRUARY 28, 2019			
10.00 AM to 10.30 AM	REGISTRATION: FRONT DESK		
10.00 AM to 11.30 AM	PLENARY SESSION: CENTENARY AUDITORIUM CHAIRPERSON: <i>Prof. Sanjoy Bhar</i> SPEAKERS: 1. <i>Prof. Dulal Mukhopadhyaya</i> 2. <i>Prof. Jayanta Bhattecherjee</i>		
11.30 PM	TEA BREAK		
11.45 AM to 01.30 PM	Scientific Session C (Oral Presentation) EINSTEIN HALL Agriculture & Environmental Sciences	Scientific Session D (Oral Presentation) DARWIN HALL Information technology & Library Sciences	Scientific Session E ₁ (Oral Presentation) CENTENARY AUDITORIUM Life Sciences
	CHAIRPERSON <i>Dr. Asoke Kanti Sanyal</i>	CHAIRPERSON <i>Prof. K. P. Majumder</i>	Jt. CHAIRPERSONS <i>Dr. Kamales Misra</i> <i>Prof. Santanu Paul</i>
01.30 PM	LUNCH		
02.00 PM to 04.30 PM	Scientific Session E ₂ (Oral Presentation) DARWIN HALL Life Sciences	Scientific Session E ₃ (Oral Presentation) CENTENARY AUDITORIUM Life Sciences	Scientific Session F (Oral Presentation) EINSTEIN HALL Chemical Sciences
	Jt. CHAIRPERSONS <i>Prof. Prabir Mukherjee</i> <i>Dr Arindam Bhattacharyya</i>	Jt. CHAIRPERSONS <i>Prof. Krishna Roy</i> <i>Dr. Sujoy Ghosh</i>	Jt. CHAIRPERSONS <i>Dr. Tarun Kumar Mondal</i> <i>Dr. Priyotosh Dutta</i>
04.30 PM to 05.30 PM	TEA VALEDICTORY SESSION Valedictory Lecture & Vote of Thanks: Jt. Secretaries		

NOTE: TIME & VENUE OF THE SCIENTIFIC SESSIONS MAY CHANGE IF SITUATION DEMANDS

PROGRAMME AT A GLANCE



Dr. Mukul Kanti Manna
President, Governing Body,
City College, Kolkata

20th February, 2019



MESSAGE

Developments in science and technology are fundamentally responsible for the economic development of the country. We also value the critical relationship between research and education. Both research informs teaching and students energize the research mission. Meanwhile, when it comes to science, mainstream media are both overwhelmed by the volume of information. In this regard I like to quote a few words from the English chemist and novelist C.P. Snow:
"A scientist has to be neutral in his search for the truth, but he cannot be neutral as to the use of that truth when found. If you know more than other people, you have more responsibility, rather than less."

Now, we are looking forward to an excellent National conference with great scientists and promising researchers from different institutions round the country and sharing new and exciting results in the diversified field of science, from February 27-28, 2019 to be held in City College, Kolkata in collaboration with the Indian Science Congress Association (ISCA), Kolkata chapter. These days will be dedicated to cover a wide spectrum of themes related to "Future India: Science and Technology".

I am particularly happy to be present in this unique event being an alumnus as well as ex-teacher of City College, and to exchange views and share experiences with other high level professors, colleagues and friends, representing many well-known Universities and Research Institutes together with the members of ISCA. Thanks to every one of the organizing committee for making this happen within a very short time.

Being the Patron in chief of the conference I heartily welcome all the distinguished speakers, scholars and researchers presenting papers and the participants to this Conference. I congratulate you for your commitment and active participation and wish you all the success.

Dr. Mukul Kanti Manna

Chief Patron,

National Conference on

"Future India: Science and Technology" 27 & 28th February



Indian Science Congress Association
Kanpur Chapter



Dr. (Mrs) Vijay Laxmi Saxena

Date: 15.02.2019



Convener: ISCA Kanpur Chapter
Coordinator: Bioinformatics Infrastructure Facility
Centre of DBT (Govt. of India)
Dept of Zoology, D.G. (P.G) College, Kanpur
General Secretary (Scientific Activities)
Indian Science Congress Association (2010-2013)
Indian Society of Life Sciences
Former Coordinator N.S.S.
C.S.J.M. University, Kanpur
Website: www.vijaylaxmisaxena.com

To,
The Principal
City College
102/1, Raja Rammohan Sarani
Kolkata-700 009.

Dear Sir,

I am glad to know that National Conference on Future India: Science and Technology is going to be organised by the City College, Kolkata in association with the Indian Science Congress Association, Kolkata Chapter to commemorate National Science Day from 27th to 28th February, 2019.

I am extremely happy to receive an invitation for this National Conference and do hope that the deliberations will be helpful for young researchers and Students.

I wish the Conference a grand success.

With best regards,

Sincerely yours,

(Dr. (Mrs.) Vijay Laxmi Saxena)

Residence: 7/182, Swarup Nagar, Kanpur-208002 (U.P) INDIA. E-Mail: vijaykanpur@rediffmail.com,
vijayashokkanpur@gmail.com Mobile no.9415125252

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भारतीय विज्ञान कांग्रेस संस्था

(विज्ञान और प्रौद्योगिकी विभाग के अधीन एक व्यावसायिक संस्था,

विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार)

14, डॉ० बिश्व गुरु स्ट्रीट, कोलकाता - 700 017, भारत

THE INDIAN SCIENCE CONGRESS ASSOCIATION

(Professional Body under Department of Science & Technology,
Ministry of Science & Technology, Government of India)

14, Dr. Biresw Guha Street, Kolkata - 700 017, INDIA

Telephone : (033) 2287-4530, 2281-5323
Website : http://sciencecongress.nic.in

Fax : 0091-33-2287-2551
E-Mail : isccal@vsnl.net
is.sciencecongress@nic.in

Dr. Manoj Kumar Chakrabarti, Ph.D., FAScT., FNASc
General President

Date: 15th January, 2019

To,
The Principal
City College
102/1, Raja Rammohan Sarani
Kolkata- 700 009.



Dear Sir,

I am extremely happy to learn that a National Conference on Future India: Science and Technology is going to be organised by the City College, Kolkata in association with the Indian Science Congress Association, Kolkata Chapter to commemorate National Science Day.

We understand that since the birth of our nation, Indian Scientists and technologists have been contributing significantly on all areas of Research such as Agricultural Research, Space Research, Nuclear Research, Defence Research, Medical Research etc. which has helped our country to prosper.

India has become self-sufficient in space research, which can be substantiated by wholly indigenous successful projects like Chandrayan to explore moon and Mangalyaan to explore Mars. Moreover, in 2017, India broke the record by launching 104 satellites from a single rocket, beating the previous record of 37 set by Russia. Additionally, Indian scientists have also shown their competence in nuclear research. India is one of the countries having complete infrastructure for a viable nuclear program. But, we should not feel satiated with our science and technological achievements. In spite of all the success stories, we are at the doorsteps of several formidable challenges. Only innovative and better transitional scientific research can rescue us from the current obstacles.

I hope the deliberations and discussions amongst the delegates at this National conference will come out with different issues related to growth and progress of future India.

I wish all success of the conference.

With best regards,

Sincerely yours,

(Dr. Manoj Kumar Chakrabarti)

Address for Correspondence

ICMR Emeritus Medical Scientist, Director, Crude Scientist & Director, in, Pharmacol



भारतीय विज्ञान कांग्रेस संस्था

(विज्ञान और प्रौद्योगिकी विभाग के अधीन एक व्यावसायिक संस्था,

विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार)

14, डॉ० बिश्व गुरु स्ट्रीट, कोलकाता - 700 017, भारत

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Dr. Ashok Kumar Saxena
Past General President, ISCA,
Sir Asatosh Mookerjee Fellow (ISCA)
and Former Emeritus Fellow I.C.C.,
New Delhi; Department of Zoology,
D.A.V. College, Kanpur;
Editor in Chief, Everyman's Science
Deen, Faculty of Science, C.S.J.M. University,
Kanpur; Principal, D.A.V. College, Kanpur

15.02.2019

To,
The Principal
City College
102/1, Raja Rammohan Sarani
Kolkata-700 009.



Dear Sir,

The two day National Seminar is going to be organised by the City College, Kolkata in association with the Indian Science Congress Association, Kolkata Chapter to commemorate National Science Day from 27th to 28th February, 2019.

The theme of the conference will be "Future India : Science & Technology ", which was the focal theme selected for 106th Indian Science Congress held at Lovely Professional university, Jalandhar from 3-7 January, 2019.

I congratulate both City College, Kolkata and Indian Science Congress Association, Kolkata Chapter for such an endeavour

With best wishes,

Sincerely yours,

(Dr. Ashok Kumar Saxena)

MESSAGES

BRIEF REPORTS:

- **Inaugural session:** The National conference was inaugurated with Tagore's song performed by college students and teachers followed by Lamp Lighting by all honorary guests. Dr Sital Prasad Chattopadhyay, Principal of City College then welcome all with his introductory speech. Felicitation of all guests was performed by City College. Dr Vijay Laxmi Saxena, the chief guest of the conference and that time General President of ISCA delivered her values talk after being felicitated by ISCA. Dr Tushar Kanti Ghosh, Convener, ISCA Kolkata Chapter then explained the theme and necessity of such conference as well. The valued Abstract book of the conference was then released jointly by Dr Ashoke K Saxena, Member, Executive Council, ISCA and Dr Mukul Kanti Manna, President, Governing Body, City College. The inaugural session was illuminated further with the valued speeches delivered by Prof. Gangadhar, General Secretary, ISCA; Dr Manoj Kumar Chakrabarty, General President, ISCA and Dr Mukul Kanti Manna Successively. The first section of the conferences ended with thanks giving ceremony by Joint Organizing Secretaries Dr Tapan Kumar Ghosh and Dr Korak Kanti Chaki.
- Following morning refreshment Prof. Dilip Mahalanobis and Prof. Ashish S Varma presented the ISCA Jawaharlal Nehru Birth Centenary Award Lecture under the chair by Dr Manoj Kumar Chakrabarti. All audiences including invited members then enjoyed the first-day Plenary Lectures delivered by Prof. Dhruvajyoti Chattopadhyay. And Dr Abhijit Majumdar. This session was chaired by Dr Tushar Kanti Ghosh.
- The Two day National Conference covered following fields of sciences with both oral and poster presentations in the scientific sessions.

FIELDS COVERED

- **Medical / Veterinary & Pharmaceutical Sciences**
- **Mathematical Sciences & Computer Sciences**
- **Physical Sciences & Engineering & Technology**
- **Agriculture & Environmental Sciences**
- **Information Technology and Library Sciences**
- **Life Sciences**
- **Chemical Sciences**
- **SCIENTIFIC SESSION- A: Medical / Veterinary & Pharmaceutical Sciences-**
After a palatable lunch two simultaneous scientific sessions continued in two lecture theatres.
In day 1, in the Darwin Hall and Poster corridor 11 participants from different University, College and other Research institutes presented their works on Medical/Veterinary and Pharmaceutical sciences either orally or by poster. This session was conducted by Dr Manoj Kumar Chakrabarti, Dr Arpita Chandra.
- **SCIENTIFIC SESSION- BI: Mathematical Sciences & Computer Sciences-**
In this session 7 participants presented their scientific works in the Einstein Hall. Some of their highlighted on Ion-acoustic solitary waves, Development of Estimation strategy, Representation theorem for topology, logistic equation etc.
- **SCIENTIFIC SESSION-B II: Physical Sciences & Engineering & Technology-** In the same venue another scientific session Physical Sciences & Engineering & Technology

was conducted where 11 participants presented their works. Audiences refreshed their knowledge about R-mode instability., Material dispersion in optic fibre, Magnetic Barkhausen noise., Direction of solar burst etc.

Both these sessions were chaired by Prof B C Chakraborty and Salil Biswas.

- **SCIENTIFIC SESSION- C: Agriculture & Environmental Sciences-** In the morning scientific session of 28th February 13 presenters presented their various works in the Agriculture & Environmental Sciences session. It was conducted in the Einstein Hall. With colourful power point presentation they emphasised on different aspects on Agriculture and Environmental sciences including Impact of vermicompost, Beneficial and harmful aspects of Fertilizers.,, Role of Municipal Sewage,,, Effects of Selenate in rice etc. Dr Asoke kanti Sanyal, the chairperson conducted the questionnaire session.
- **SCIENTIFIC SESSION- D: Information Technology and Library Sciences-** In a simultaneous session in the Darwin hall oral presentation was conducted under the supervision of Prof. K P Majumder. Here total 7 oral presentations were delivered their works specifically on E-journals Consortia, Anti plagiarism software, Economic analysis of the IT-ITES sector in India, Cognition of electronic resources etc. The chairperson concluded the session after the questionnaire Part.
- **SCIENTIFIC SESSION E- I: Life Sciences-** On 28th February in the Centenary auditorium first part of Life Science session was held where out of 74 participants some of them represented numerous aspects of life sciences that included Behavioural alteration of fresh water crab, Current status and socio-economic importance small indigenous fishes, E-waste problems in India, Ergonomic study on the onset of musculoskeletal disorders etc. Dr Kamales Misra and Prof. Santanu Paul jointly chaired the session and conducted the questionnaire part too.
- **SCIENTIFIC SESSION- E II: Life Sciences-** In the Darwin hall on 28th February, the second part of the Life science session was held under the supervision of Prabir Mukherjee and Dr Arindam Bhattacharyya. The audio-visual presentation of their works highlighted specifically on Importance of Genetic studies in conservation of Asiatic lions, Effects of arecoline on pineal-testicular axis in rats, Domestic method of decaffeination of black tea etc. An interesting questionnaire session represented the importance of the session.
- **SCIENTIFIC SESSION E- III: Life Sciences –** After lunch in the Centenary auditorium the last part of Life Science oral session was held under the guidance of Prof. Krishna Roy and Dr Sujoy Ghosh. Presenters focused on different aspects of all branches of Life science. Few included Cytotoxic activity *Annonamuricata* leaves on human liver cancer, Gut Microflora of Anopheles mosquitoes, Post monsoon avian diversity in AJAB Indian Botanical garden etc. Audiences enjoyed and updated their concepts from such versatile presentations.
- **SCIENTIFIC SESSION- F II: Chemical Sciences-** The post lunch scientific session of the last day of the Conference was on Chemical Sciences that included total 18 participants. It was held in the Einstein Hall. Dr Tarun Kumar Mondal and Dr Priyotosh Dutta jointly chaired the session. Participants from different academic and scientific institutions presented their various works to the audience that included from the untold story of the World's first tortured female scientist to Metallurgy in ancient Indian coin, Reduction by aqueous Titanium etc . The Session ended with questionnaire session with great appreciation.

POSTER SESSION

From all branches of science a number of presenters exhibited their valued works by Colourful posters. In separate segments of the Poster Corridor wall those were kept hanging throughout the two-day long duration of the conference. Prof Manoj Kumar Chakrabarti and Dr Abhijit Majumdar officially opened the session during the post lunch period of first day. However different experts from respective streams have conducted the questionnaire part with the presenters in each section. Interested students, teachers and other visitors of different subjects also got chances to fulfil their queries about the topics presented there. All of them enjoyed this vibrant session with ample chances to interact individually with the poster presenters for a long time in each section.

ABSTRACT BOOK

The Most Important Success of this National Conference was reflected in the Publication of the Abstract Book ,” **National conferences on FUTURE INDIA: SCIENCE AND TECHNOLOGY”with ISBN No. 978-93-5351-471-6**. This book was published by the Principal of City College Dr Sital Prasad Chattopadhyaya in the inaugural session of first day of the conference. Prof Tushar Kanti Ghosh and Dr Mukul Kanti Manna along with other faculty members of City College critically reviewed all abstracts with great efforts before putting its final shape. Messages from all dignitaries of ISCA and City Colleges were placed in the book. It also included brief history of the century old City College and Indian Science Congress Association. More than 100 abstracts, each in separate page from all the sections of Science, Technology, Information and Library sciences were published in the book.

Valedictory Session

In the end part of the Conference of last day afternoon, presenters of all oral and poster sessions were honoured with certificate of appreciation and presentation. Chairpersons of different sessions and honorary guests presented the certificates to them. The Valedictory Lecture was delivered by Chief Parton Dr Mukul Manna who emphasised on the success of the conference. He also mentioned the necessarily of such conference in future and encouraged all young delegates to be involved either in participating or organizing such kinds of versatile scientific conference. Joint secretaries Dr Tapan Ghosh and Dr Korak Kanti Chaki expressed their sincere thanks to each and everybody, and earnest gratitude to all patronisers who extended their immense helps either financially or by other means.

National Conference on
FUTURE INDIA : SCIENCE AND TECHNOLOGY

27th & 28th February, 2019

Jointly organised by



City College Kolkata - 700 009



**Indian Science Congress Association
Kolkata Chapter**

ABSTRACTS

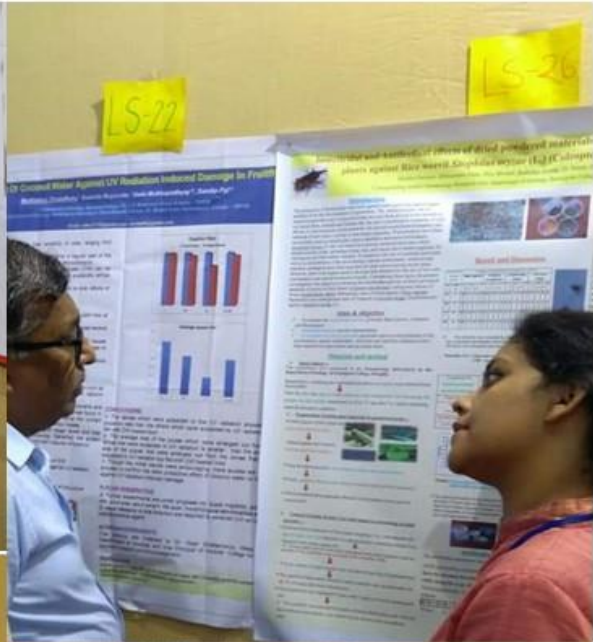
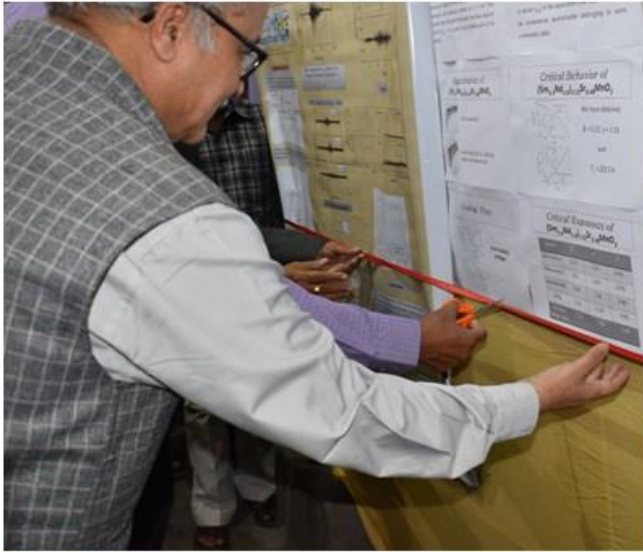


Venue: City College
102/1, Raja Rammohan Sarani,
Kolkata – 700 009, West Bengal, India

ABSTRACT BOOK







AE-10

Labeo rohita swim-up fry, establishing a new model to study endocrine disrupting chemical contamination in aquatic environment - in context of reproductive toxicology

Shreyasi Gupta, Dilip Mukherjee*, Ashis Kumar Panigrahi
Department of Zoology, Kalyani University, Kalyani, Nadia

What are Endocrine disruptors?

- Exogenous chemical agent in the environment that can alter normal endocrine system without leading to dysfunction.
- Disruptors may act directly or indirectly.
- Without acting disruptors are usually hormones, agonists or antagonists that interfere with hormone actions on target cells.
- Endocrine acting disruptors alter hormone dynamics in circulation, change hormone metabolism, or interfere with hormone regulation.

Classes of Endocrine Disruptors

Estrogens: DDT, p,p'-DDT, Dieldrin, Arochlor, Hexachloro-4 bicyclohexyl, Aldrin, dieldrin, p,p'-DDE, trans-nonachlor

Progesterone: Nonylphenols, organophosphates

Thyroidic agonists: PCBs, polycyclic aromatic hydrocarbons (PAH), Phthalate esters, Acetylcholinesterase

Androgens: Cadmium, nickel, aluminum

Retinoids: Vitamin A analogs

Methods used

- Real-time PCR
- qPCR
- Gene sequencing
- Flow cytometry
- Western blot
- ELISA of vitellogenin

Biomarkers

Gene expression: vitellogenin, vitellogenin mRNA

Model organism

Labeo rohita (freshwater fish)

Size: 1.2-1.8 cm

Weight: 1.0-1.5 gm

Sex: male and female

Results

Effect of estrogenic (17 β -estradiol & BPA)

Group	Gene Expression	Gene Expression
Control	Low	Low
17 β -E2	High	High
BPA	High	High

LS-29

Cytotoxic potential of Betel nut extract on S-180 tumour bearing mouse

Sudipta Chowdhury and Samarendra Nath Banerjee
Department of Zoology, Ram Mohan College, 102/1 Raja Ram Mohan Sarani, Kolkata-700005, India

ABSTRACT

Betel nut extract (BNE) is widely used in India and South Asia. It is a natural product that has been shown to have anticancer activity. The present study was designed to evaluate the cytotoxic potential of BNE on S-180 tumour bearing mice. The results of the study are discussed below.

RESULTS

Different doses of BNE extract were tested on S-180 tumour bearing mice. The results showed that BNE extract significantly inhibited the growth of S-180 tumour cells in a dose-dependent manner. The IC₅₀ of BNE extract was found to be 1.2 mg/ml. The study also showed that BNE extract significantly reduced the tumour volume and weight in S-180 tumour bearing mice. The results of the study are discussed below.

CONCLUSION

The present study has demonstrated that BNE extract has a significant cytotoxic potential against S-180 tumour cells. The study also showed that BNE extract significantly reduced the tumour volume and weight in S-180 tumour bearing mice. The results of the study are discussed below.

S180 - tumor toxicity with an alternative, T&E method to analyze

ABSTRACT

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GUT MICROBIOTA OF Anopheles MOSQUITOES AND THEIR IMPLICATION TO CONTROL THE VECTORIAL ABILITY

SIBKY SHAIK, SUDEPTA BANERJEE, ANU CHATTOPADHYAY
DEPARTMENT OF ZOOLOGY, RAM MOHAN COLLEGE, KOLKATA-700005, INDIA

ABSTRACT

The present study was designed to evaluate the cytotoxic potential of BNE on S-180 tumour bearing mice. The results of the study are discussed below.

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Different doses of BNE extract were tested on S-180 tumour bearing mice. The results showed that BNE extract significantly inhibited the growth of S-180 tumour cells in a dose-dependent manner. The IC₅₀ of BNE extract was found to be 1.2 mg/ml. The study also showed that BNE extract significantly reduced the tumour volume and weight in S-180 tumour bearing mice. The results of the study are discussed below.

CONCLUSION

The present study has demonstrated that BNE extract has a significant cytotoxic potential against S-180 tumour cells. The study also showed that BNE extract significantly reduced the tumour volume and weight in S-180 tumour bearing mice. The results of the study are discussed below.



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Two- Day National Seminar On “Future of India: Science and Technology”



Date: 27th & 28th February, 2019

Organized jointly by Science Departments & IQAC

City College

102/1, Raja Rammohan Sarani, Kolkata-700009, West Bengal

Certificate of Participation

This is to certify that Srikanta Guria attended the Two-Day National Seminar On “Future of India: Science and Technology” held on 27th and 28th February, 2019, jointly organized by the Science Departments and IQAC of City College, Kolkata - 700009



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