

## CONFERENCE THEMES

- Immune –mediated inflammatory responses
- Impact on neurobiology
- Bioinformatics and therapeutics
- Long COVID
- Human Health & Diseases
- Cell biology & Signaling
- Genetics and Epigenetics
- Cancer biology
- Medicinal plants as therapeutics
- Plant biotechnology and diseases
- Application of omics
- Genetic toxicology

## PRESENTATION

Plenary lectures will be of 25 minutes and invited lectures will be of 20 minutes duration. Oral Presentations will be of 10 minutes duration. Poster dimensions: 34" x 42" (W x H)

## ABSTRACT

Abstracts (oral and poster presentations) should be limited to **200 words** and would consist of title, authors' name, affiliations and body should be sent to Dr. Ashok K. Giri at [aicgg.in@gmail.com](mailto:aicgg.in@gmail.com), strictly as MS-Word document, latest by **22<sup>nd</sup> January, 2023**. Selected Lectures will be published as 20<sup>th</sup> AICGG proceedings in the Journal "THE NUCLEUS" published by Springer, Nature.

## ACCOMMODATION

Participants will have to pay for registration and accommodation at guest house/hotel (on sharing basis). Accommodation will be on first come first served basis. Registration form should be duly filled up and sent to Dr. Ashok K. Giri ([aicgg.in@gmail.com](mailto:aicgg.in@gmail.com)) **on or before 22.01.23**. Bookings for accommodation will be made strictly against payment of registration fee and accommodation charges.

## All India Congress of Genetics And Genomics



ESTD: 1971

## 20<sup>th</sup> All India Congress of Genetics and Genomics &

National Special Symposium on  
**"Impact of COVID- 19: A Retrospective Analysis on Human Health and Environment"**

**January 30 – 31, 2023**

*Jointly Hosted by*

**CSIR-Indian Institute of Chemical Biology**

&

**Archana Sharma Foundation of Calcutta**



Website: <http://www.aicgg.org.in>

E-Mail: [aicgg.in@gmail.com](mailto:aicgg.in@gmail.com)



## INVITATION

With immense pleasure, we invite you all to the 20th All India Congress of Genetics and Genomics, to be held at CSIR-Indian Institute of Chemical Biology, Kolkata, during January 30-31, 2023. The congress aims to provide an excellent forum for wide discussion of many of the issues in the field of virus, bacteria; plant, animal and human genetics. In addition to invited lectures posters will be the main form of presentation with a dedicated young scientist session. We solicit your active participation.

*Ashok K. Giri*  
President  
20th AICGG, CSIR-IICB

### ALL INDIA CONGRESS OF GENETICS AND GENOMICS

**President :** **Prof. Asis Datta**, D.Sc., FNASc., FASc.,  
FNA. FTWAS (New Delhi)

**Vice President :** **Prof. Partha P. Majumder**, Ph.D., FASc.,  
FNASc., FNA. (ISI)  
**Prof Arun Bandyopadhyay**, PhD  
(CSIR-IICB, Kolkata)

**Secretary Convener :** **Dr. Ashok K. Giri**, Ph.D., D.Sc., FNASc.,  
FNA. (CSIR-IICB, Kolkata)

**Jt. Secretary Convener :** **Dr. Pritha Bhattacharjee**, Ph.D.  
(CU, Kolkata)

**Secretary :** **Prof. Anita Mukherjee**, Ph.D.  
(CU, Kolkata)

## VENUE

Kolkata, popularly known as City of Joy, is a city harnessing the conglomeration of different cultural communities of India and abroad. The British influence on the architectural lineage of the Metropolis lies with its Greco-Roman style buildings and the aristocratic life style of yesteryears. CSIR-Indian Institute of Chemical Biology was established in 1935 as Indian Institute of Medical Research and rechristened in 1956. The institute has developed an oral vaccine for cholera, herbal products for controlling gastric ulcer, diagnostic kits for malignancy and hormonal disorders, etc. The conference will be held in the Prof J. C. Ray Auditorium, CSIR-IICB. 4, Raja S. C. Mullick Road, Kolkata 700032.

### Organizing Committee

#### Chairperson:

Prof Arun Bandyopadhyay, Director (CSIR-IICB)

#### President

Dr. Ashok K. Giri (CSIR-IICB)

#### Organizing Secretary:

Dr. Pritha Bhattacharjee (C.U)

#### Convener

Dr. Smrutisanjita Behera (CSIR-IICB)

#### Treasurer:

Dr. Anita Mukherjee (C.U.)

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Dr. Amita Pal, Bose Institute (Rtd.)

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Dr. Asoke Pal, MGIMS Maharashtra.

Dr. Sutapa Mukherjee, CNCI

Dr. Nilanjana Banerjee, MVK

Dr. Nandajee Kumar, MU (Rtd.)

Dr. Sudin Bhattacharya, CNCI (Rtd.)



**Final Program for 20<sup>th</sup> All India Congress of Genetics and Genomics  
&  
National Special Symposium on  
Impact of COVID- 19: A Retrospective Analysis on Human Health and Environment  
Organized by  
CSIR-Indian Institute of Chemical Biology  
And  
Archana Sharma Foundation of Calcutta  
Jan 30-31, 2023**

<b>January 30, 2023</b>	
Time	Sessions/Talks
9:30am – 10:30am	<b>Registration</b>
9:50 am – 10:00 am	<b>Inaugural Function</b> Lighting of the Lamp
10:00 am -10:30 am	Welcome Address by <b>Prof. Arun Bandyopadhyay</b> , Director, IICB Address by <b>Prof. Partha P. Majumder</b> , Vice-President, AICCG Address <b>Prof. Indranil Manna, Director of IIT-Kanpur</b> Address by <b>Dr. Ashok K. Giri</b> , President, 20 <sup>th</sup> AICCG Address by <b>Dr. Pritha Bhattacharjee</b> , Organizing Secretary, Vote of thanks by <b>Prof. Anita Mukherjee</b> , Secretary, AICCG
10:30am – 11:00am	<b>High Tea</b>
<b>Plenary Session</b> <b>Chairpersons: Dr. Chandrima Shaha &amp; Dr. Amit Ghosh</b>	
11:00am – 11:10am	Introductory Remark by <b>Prof. Indranil Manna, Director of IIT-Kanpur</b> about Professor G. K. Manna
11:10am -11: 50 am	<b>8th Prof. G. K. Manna Memorial LectureDr.</b> <b>Sagar Sengupta, Director, NIBMG</b>
11:50am -11:55 am	<b>Award to Dr. Sagar Sengupta by Prof. Indranil. Manna</b>
<b>Chairpersons: Dr. Chitra Mandal &amp; Dr. Kunal Ray</b>	
12:00 – 12: 20pm	Introductory Remark by <b>Prof. Manju Sharma</b> aboutProfessor A.K. Sharma
12:20pm –12:55pm	<b>3rd Prof. A. K. Sharma Memorial Lecture Dr.</b> <b>Arun Bandyopadhyay, Director, CSIR-IICB</b>
12:55pm - 1:00pm	<b>Award to Dr. Arun Bandyopadhyay by Dr. Chitra Mandal</b>
1:30pm – 2:30pm	<b>Working LUNCH</b>
1:00 pm – 3:00 pm	<b>POSTER SESSION</b>

<b>Technical Session-1</b> <b>Chairpersons: Dr. Syamal Roy and Dr. Susanta Roychowdhury</b>	
3:00pm – 3:15pm	<b>Dr. Dhrubajyoti Chattopadhyay, VC, SNU</b>
3:15pm – 3:30pm	<b>Modulation of host cell glycolysis by influenza A virus structural proteins</b> Maitreyi S Rajala Molecular Virology Laboratory, School of Biotechnology, Jawaharlal Nehru University, New Delhi
3:30pm – 3:45pm	<b>A convalescent plasma RCT in India gleaned major insights into severe COVID-19 pathogenesis</b> Dr. Dipyaman Ganguly, CSIR-IICB
3:45pm – 4:00pm	<b>Therapeutic and Diagnostic Potential of the Human Gut Virome</b> Dr. Kanchan Bhardwaj Department of Biotechnology, Faculty of Engineering and Technology, Manav Rachna International Institute of Research & Studies, Faridabad, Haryana
4:00pm-4:15pm	<b>Human PRE-PIK3C2B exhibits long-range intra- and inter-chromosomal interactions with regions enriched in repressive marks</b> Dr. Jayant Maini Faculty, MRIIRS, Faridabad
4:15 pm -4:30 pm	<b>TEA BREAK</b>
<b>Technical Session-2</b> <b>Chairpersons: Dr. Pijush Das and Dr. Nahid Ali</b>	
4:30 pm- 4:45 pm	<b>Insight into the DNA breaks-induced genomic instability and the underpinning cause of human diseases.</b> Prof. Benu Brata Das Laboratory of Molecular Biology, School of Biological Sciences, Indian Association for the Cultivation of Science
4:45 pm-5:00 pm	<b>To die or not to die: Who takes the call, host or parasite?</b> Dr. Anindita Ukil, Department of Biochemistry, CU
5:00 pm -5:15 pm	<b>Oligomeric state of Copper Transporter CTR1 governs its endocytosis</b> Dr. Arnab Gupta Department of Biological Sciences, Indian Institute of Science Education and Research, Kolkata
5.15 pm -5.30 pm	<b>Investigating heterogeneity in glaucomatous neurodegeneration using functional genomics</b> Dr. Moulinath Acharya, National Institute of Biomedical Genomics
5:30 pm – 5.45 pm	<b>Genomic diagnostic: does it troubleshoot or ask more questions?</b> Dr. Dipanjana Datta, Genetic consultant, Kolkata
5:45 pm-6:00 pm	<b>Early Effectors of crop destroyers could hold a key in strategizing control of disease progression</b> Dr. Sucheta Tripathy, CSIR-IICB
6:00 pm -7:00 pm	<b>Cultural Program</b>
7:00pm – 8:00pm	<b>DINNER</b>

<b>January 31, 2023</b>	
<b>Technical Session: 3</b>	
<b>Chairpersons: Dr. Rupak Bhadra &amp; Dr. Partha Chakraborty</b>	
<b>Time</b>	<b>Sessions/Talks</b>
9:30 am – 9:45am	<b>Matrix Metalloprotease 13 Promoter Polymorphism and Association with Endometriosis Progression</b> Dr. Snehasikta Swarnakar CSIR-Indian Institute of Chemical Biology Jadavpur, Kolkata
9:45 am – 10:00am	<b>Prof. Sharmila Sengupta, NIBMG</b>
10:00am – 10:15am	<b>How gene sequencing unravelled a tale of two protozoa and a virus: Kala-azar-a “triple pathogen” phenomenon?</b> Dr. Subhajit Biswas, CSIR-Indian Institute of Chemical Biology Jadavpur, Kolkata
10:15am – 10:30am	<b>GSH-mediated regulation of identified miRNAs in Arabidopsis thaliana to impart resistance against biotic and abiotic stress</b> Dr. Sharmila Chattopadhyay CSIR-IICB
	<b>Technical Session: 4</b>
	<b>Chairpersons: Prof Aniruddha Mukhopadhyay &amp; Prof. Sampa Das</b>
10:30am – 10:45am	<b>Glutamate dehydrogenase regulates lifespan by connecting carbon and nitrogen metabolism in Saccharomyces cerevisiae</b> Prof. G.K. Azad, Patna University
10:45am – 11:00am	<b>Multifaceted effects of early life arsenic exposure: integrative approachh to determine the role of cellular memory modules as common origin for multiple disease endpoints</b> Dr. Vikash Srivastava, IITR
11:00am – 11:15am	<b>Association of JunD with NEAT1 lncRNA accentuates arecoline-induced head and neck carcinogenesis</b> Dr. Urmi Chatterjee, Department of Zoology, CU
11:15am – 11:30 noon	<b>Genetic alterations and dysregulation of associated molecular pathways in arsenic induced bladder cancer; a hospital-based study in West Bengal</b> Dr. Amlan Ghosh, Presidency University
11:30 noon – 12:00 noon	<b>TEA BREAK</b>

	<b>Technical Session:5</b>
	<b>Chairpersons:</b> <b>Dr. Sib Shankar Roy, CSIR-IICT &amp; Dr. A.K. Azad Mandal, VIT</b>
12:00 - 12: 15 pm	<b>Dr. Sujit Roy, Burdwan University</b>
12:15 pm – 12:30 pm	<b>Differences in COVID 19 manifestation and vaccine response among individuals with Down syndrome from high and low income countries</b> Dr. Sujoy Ghosh, Calcutta University
12: 30pm – 12:45pm	<b>Neurodegeneration in Copper Metabolism Disorders: An Attempt to Understand the Physiology to Understand the Pathology</b> Dr. Ashima Bhattacharya Amity University
12: 45 pm – 1:00 pm	<b>Fungal pathogens as bioherbicides against the noxious macrophyte water hyacinth</b> Dr. Puja Ray Presidency University
1:00 pm – 1:15 pm	<b>To smoke or not to smoke: Identifying polymorphic cis-regulatory variants as risk markers for lung carcinogenesis modulating chemotherapy responses in tobacco smokers of Eastern India</b> Dr. Mainak Sengupta, University of Calcutta
1:30 pm – 2: 15 pm	<b>Working Lunch</b>

	<b>Technical Session: 6</b>
	<b>Chair Persons: Dr. Debabrata Biswas &amp; Dr. Chinmay Chowdhury</b>
2:15 pm – 2:30 pm	<b>Dysregulated Interplay of G2/M effectors: A Promising Link for Acquisition of Radioresistance in Cervical Cancer</b>  Dr. Sutapa Mukherjee, CNCI
2: 30 pm – 2:40 pm	<b>The twain's tryst – intestinal microbes beguile mammalian well being</b>  Dr. Moumita Bhaumik Ghosh, NICED
2: 40 pm – 2: 50 pm	<b>Good things in small packages: Phytochemicals and drug delivery today</b>  Dr. Swarupa Ghosh, Faculty, Alipurduar
2: 50 pm – 3:00 pm	<b>Chloride transporters and GABA A receptors are important contributors in autism spectrum disorders</b>  Dr. Nilanjana Banerjee, Manovikas Kendra
3:00 pm – 3:10 pm	<b>A bimodal regulator of apoptosis and inflammation in macrophage, exploited by Leishmania parasite as its key survival strategy.</b>  Dr. Shalini Roy, Department of Biochemistry, CU

Technical Session – 7	
Chair Persons: <b>Dr. Rupasree Ain &amp; Dr. Krishnananda Chattopadhyay</b>	
3:10 pm – 3:25 pm	<b>Dr. Riddhi Dutta</b>
3:25 pm -3:35 pm	<b>Alteration of host sialic acids during Leishmania donovani infection modulates TLR4-mediated innate immune response</b>  Dr. Jayashree Karmakar, IACS
3:35 pm – 3:45 pm	<b>Neuron- and oligodendroglia-derived blood EV-<math>\alpha</math>-synuclein distinguishes between synucleinopathies</b>  Dr. Suman Dutta, IIIT, Kolkata
3:45 pm – 3:55 pm	<b>Epigenetic alteration of mitochondrial biogenesis regulatory genes in chronic arsenic exposure: A population-based study from West Bengal, India</b>  Dr. Tamalika Sanyal, CU
3:55 pm - 4:05 pm	<b>Removal of the N-terminal MYB domains perturbs the conformational stability of Arabidopsis thaliana MYB12 transcription factor under UV-B stress in vitro</b>  Dr. Samrat Banerjee, Burdwan University
4:05 pm - 4:15 pm	<b>Understanding Ets1 mediated mitochondrial alterations through Drp1 Regulation</b> Deepshikha Ghosh, CSIR-IICB
4:15 pm – 4:25 pm	<b>Impairment of osteoblast's collagen synthesis and matrix mineralization effectuates skeletal fluorosis in mice: involvement of epigenetic regulation</b> Arpan De Bhowmick, Viswa Bharati University
4:25 pm – 4:45 pm	<b>TEA BREAK</b>
4:45 pm – 5:15 pm	<b>AICCG GENERAL BODY MEETING</b>
5:15 pm – 5:45 pm	<b>Valedictory session Announcement of Prizes</b>

## **Titles & Author names of the Poster Session**

**P1** The genetic variants of GABA-receptor subunits are significantly associated with autism spectrum disorders

**Pallabi Adak, Swagata Sinha and Nilanjana Banerjee**

Manovikas Biomedical Research and Diagnostic Centre, <sup>2</sup>Out Patient Department. Manovikas Kendra Rehabilitation and Research Institute for the Handicapped, Kolkata

**P2** Impairment of osteoblast's collagen synthesis and matrix mineralization effectuates skeletal fluorosis in mice: involvement of epigenetic regulation

**Arpan Dey Bhowmik, Ansuman Chattopadhyay**

Department of Zoology, Visva-Bharati, Santiniketan

**P3** N-gene Variations in SARS-Cov-2 Genome Contributed to its Increased Virulence in the North Indian Population

**Samiya Baby, Vineeta Sharma, Sukhveer Singh, Deepak Kumar Sachan, Abhishek Mishra, Ramakrishnan Parthasarathi, Vikas Srivastava**

Systems Toxicology and Health Risk Assessment Group, CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Vishvigyan Bhawan, 31 Mahatma Gandhi Marg, Lucknow.

**P4** Obesity- is it a trap of leisure? Perspectives from lifestyle pattern, genetic –epigenetic mechanism and indigenous solution **Sunandini Ghosh, Pritha Bhattacharjee**

Environmental Epigenomics Laboratory, Department of Environmental Science, University of Calcutta

**P5** Zinc-Induced Adaptive Response To Ameliorate EMS-Induced Genotoxic Stress In Plants **Manoswini Chakrabarti\* And Anita Mukherjee**

Department Of Botany, University of Calcutta

**P6** Hypomethylation of IGF2 DMR promotes early onset of metabolic syndrome in mice after prenatal arsenic exposure

**Kavita Koshta, Vikas Srivastava**

Developmental Toxicology Laboratory, Systems Toxicology and Health Risk Assessment Group, CSIR-Indian Institute of Toxicology Research, Vishvigyan Bhawan, 31, Mahatma Gandhi Marg, Lucknow, Uttar Pradesh

**P7** The ameliorative strategies against arsenic associated neurodegeneration and cognitive dementia: a promising insight

**Souptik Iswar<sup>1</sup>, Krishnendu Ghosh<sup>2</sup>, Pritha Bhattacharjee**

**P8** Gestational arsenic-induced over-expression of PU.1 increases the microglial number in Balb/c mouse

**Rajib Kumar Dey, Ranjana Kumari, Satyakam Patnaik and Debabrata Ghosh**



Immunotoxicology Laboratory, Food, Drug & Chemical Toxicology Group and Nanomaterial Toxicology Group, CSIR Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, Uttar Pradesh, India.

**P9** Mechanistic insights of oncolytic measles virus induced selective killing of triple negative breast cancer cells

**Alok Kumar, Geetanjali, Maitreyi S Rajala.**

Molecular Virology Laboratory, School of Biotechnology, Jawaharlal Nehru University, New Delhi.

**P10** Chronic arsenic toxicity: an endless challenge? Deciphering the ‘genetic-epigenetic error’

**Ankita Das, Tamalika Sanyal, Pritha Bhattacharjee, Indraneel Rakshit, Pritha Bhattacharjee (Sr)<sup>1\*</sup>**

Environmental Epigenomics Laboratory, Department of Environmental Science, University of Calcutta

**P11** Interplay of TP63 isoforms with epithelial-mesenchymal transition, cancer stemness, and chemoresistance in oral squamous cell carcinoma

**Anurima Samanta, Durgaprasad Nanda, Rajdeep Parmesh Guha, Anup Bhowmick, Amitava Ray, Srabanti Hajra, Aneek Chakraborty, Sudip Das, Dona Sinha**

Dept. of Receptor Biology and Tumor Metastasis, Chittaranjan National Cancer

**P12** Tea extract realigns nrf2 for improved chemotherapeutic implications in lung adenocarcinoma cells

**Suchisnigdha Datta and Dona Sinha**

Dept. of Receptor Biology and Tumor Metastasis, Chittaranjan National Cancer Institute.

**P13 Cell Death and Associated Pulmonary Damages in Calcium Carbide Exposed Mice- An in vivo Study**

Soumi Banerjee, Pujita Ghosh and Kaustav Dutta Chowdhury

Department of Zoology, Rammohan College

**P14** Dual role of pro-inflammatory cytokines in Alzheimer's disease: Present research findings and future therapeutic targets

**Apratim Goswami**

PG Semester 1, Department of Zoology, Asutosh College, University of Calcutta.

**P15** Immune-modulating effects of stearylamine bearing cationic liposomes, PC-SA in complexation to doxorubicin

**Sneha Ghosh, Manjarika De, Sonali Das, Nahid Ali**

CSIR-Indian Institute of Chemical Biology, Kolkata.



**P16** An Integrated Approach to Analyse the Role of Turmeric (*Curcuma longa*) on EDC-induced Menstruation-related Disorders

**Shrinjana Dhar, Pritha Bhattacharjee\***

Environmental epigenomics laboratory, Department of Environmental Science, University of Calcutta.

**P17** Comprehensive analysis of influenza A virus nucleoprotein interaction with host cell nucleolin

**Mohd Salman, Shruti Mishra, Maitreyi S. Rajala**

Molecular Virology Laboratory, School of Biotechnology, Jawaharlal Nehru University, New Delhi

**P18** Role of Histone Acetylation, Deacetylation and Associated Regulators in Neurodegenerative Diseases: Present Perspective and Potential Therapeutic Targets

**Koyena Das**

PG Semester 1, Department of Zoology, Asutosh College, University of Calcutta

**P19** Targeting Biomarkers in Liquid Biopsy: Comprehending the disease progression in Urinary Blood Cancer

**Sreejit Pal**

Department of Zoology, Ramakrishna Mission Vidyamandira, Belur Math, Howrah, West Bengal

**P20** Role of Epigallocatechin-3-Gallate in Regulation of Known and Putative Novel microRNAs Targeting the Wnt Pathway in Breast Carcinoma Cells Revealed by Next Generation Sequencing

**Shrila Banerjee and A K A Mandal**

Department of Biotechnology, School of Bio Sciences and Technology, VIT University, Vellore, India

**P21** Glutathione regulates subcellular iron homoeostasis in *Arabidopsis thaliana* under iron starvation

**Ranjana Shee, Soumitra Paul, Riddhi Datta**

Department of Botany, University of Calcutta

**P22** Investigation of the role of Xa3/26 in *Xanthomonas oryzae* pv. *oryzae* infection in Rice.

**Ishani Mondal, Sandip Barman, Smrutisanjita Behera**

Molecular Genetics Division, CSIR-Indian Institute of Chemical Biology, Kolkata.

**P23** AN ANALYSIS OF TUIBUR'S CARCINOGENIC POTENTIAL AND STOMACH CANCER IN MIZORAM

**Priya Bhowmick\*, Lalrinhlupuii<sup>2</sup>, R.B. Muthukumaran<sup>2</sup>, Pritha Bhattacharjee<sup>1\*</sup>**

Environmental Epigenomics Laboratory, Department of Environmental Science, University of Calcutta



**P24** Repurposing of clinical drugs for anti-leishmaniasis therapy  
**Nicky Didwania, Chantal Reigada, Claudio A. Pereira, Nahid Ali**  
CSIR-Indian Institute of Chemical Biology, Kolkata, India.

**P25** Role of E gene Xa27 in broad spectrum resistance against *Xanthomonas oryzae* pv *oryzae*  
**Hrimeeka Das, Smrutisanjita Behera**  
Molecular Genetics Division, CSIR- Indian Institute of Chemical Biology, Kolkata.

**P26** *Leishmania donovani* Aurora Kinase (LdAIRK): A promising diagnostic candidate against visceral leishmaniasis.  
**Rudra Chhajer, Anirban Bhattacharyya, Mohd. Kamran and Nahid Ali**  
CSIR-Indian Institute of Chemical Biology, Kolkata

**P27** Understanding the association of air pollution with Covid mortality and various sociodemographic factors in India  
**Mohammed Talib, Kripabandhu Ghosh, Gopala Krishna Darbha**  
Environmental Nanoscience Laboratory, Department of Earth Sciences, Indian Institute of Science Education and Research Kolkata, Mohanpur, West Bengal 741246, India

**P28** Genetic toxicology of cadmium selenide quantum dots (QDs) in *Allium cepa* plant  
**Ritesh Banerjee, Priya Goswami, Amitava Mukherjee and Anita Mukherjee**  
School of Biological and Environmental Sciences, Shoolini University, Solan – 173212, Himachal Pradesh, India

**P29** Understanding The Mechanism of Compartmentalization of mRNAs and RNA Binding Proteins to RNA Processing Bodies in Mammalian Cells:  
An in vitro approach  
**Sritama Ray, Kamalika Mukherjee, Suendra N Bhattacharyya**  
RNA Biology Research Laboratory, Molecular Genetics Division, Council of Scientific and Industrial Research (CSIR)-Indian Institute of Chemical Biology, Kolkata, India

**P30** Promising role of Curcumin in attenuating sodium arsenite-induced acute kidney injury:  
An in vitro and an in-silico study  
**Indraneel Rakshit, Pritha Bhattacharjee**  
Department of Environmental Science, University of Calcutta

**P31** An evidence of drug repurposing for COVID-19 pandemic based on In-silico investigation from phenolic derivatives of *Silybum marianum* against SARS-CoV-2 proteins  
**Swaraj Mohanty<sup>1</sup>, Soumya Lipsa Rath<sup>2</sup>, Poornima Sharma<sup>1</sup> and Yasmin Ahmad**  
Pathophysiology and Disruptive Technology(PDT) Division, Defence Institute of Physiology & Allied Sciences (DIPAS), Defence Research & Development Organization (DRDO), Lucknow Road, Timarpur, Delhi-110054, India



**P32** Appraisal of antibacterial activity of the leaf extracts of *Aegle marmelos* L. Correa  
**Archana Kumari Singh and Vishnu Shankar Sinha**  
Department of Botany, Kolhan University, Chaibasa

**P33** Appraisal of genotoxicity of aqueous leaf extract of some therapeutic plant species  
**Vishnu Shankar Sinha and Nandjee Kumar**  
Department of Botany, Tata College, Chaibasa, Jharkhand

**P34** Role of herbal regimen in management of hypertension – a review  
**Arpita De and Trishita Mitra**  
Dept. of Botany, Nrupathunga University, Bengaluru, Karnataka

**P35** A study of m6a epitranscriptomic writer-eraser modification in arsenic-induced acute kidney injury  
**Sudeshna Mandal, Pritha Bhattacharjee**  
Environmental Epigenomics Laboratory, Department of Environmental Science, University of Calcutta

**P36** Prenatal arsenic exposure alters gut microbial composition and augments gut permeability in postnatal life despite an absence of ongoing arsenic exposure  
**Mainak Chakraborty, Oishika Das, Aaheli Masid, Anupam Gautam, Moumita Bhaumik**  
ICMR-National Institute of Cholera and Enteric Diseases, P33 CIT Road, Scheme XM, Beliaghta, Kolkata, India

**P37** Combined toxicity effects of polystyrene nanoplastics and polycyclic aromatic hydrocarbons on *Chlamydomonas reinhardtii*  
**Gopi Narayanan, Gopala Krishna Darbha**  
IISER, Kolkata.

**P38** GSH-mediated regulation of identified miRNAs in *Arabidopsis thaliana* to impart resistance against biotic and abiotic stress  
**Aparupa Bose Mazumdar Ghosh, Riddhi Datta a, Kajal Mandal, Priyanka Boro, Asma Sultana and Sharmila Chattopadhyay**  
Plant Biology Laboratory, Organic & Medicinal Chemistry Division; CSIR-Indian Institute of Chemical Biology 4, Raja S.C. Mullick Road Kolkata- 700 032

**P39** Molecular determinants of Epithelial Mesenchymal Transition in mouse placenta and trophoblast stem cell  
**Shipra Kanti Jena, Shreya Das, Shreeta Chakraborty and Rupasri Ain**  
Division of Cell Biology and Physiology, CSIR-Indian Institute of Chemical Biology, Kolkata.

**P40** Prenatal exposure to arsenic promotes sterile inflammation through Polycomb repressive element EZH2 and accelerates skin tumorigenesis in mice model

**Vineeta Sharma, Siddhartha Gangopadhyay and Vikas Srivastava**

Department of Biotechnology, Faculty of Engineering and Technology, Manav Rachna International Institute of Research and Studies, Faridabad, Haryana.

**P41** FOXO4: plays pivotal role in trophoblast giant cell formation and development of placenta

**Priyanka Das, Sourav Ganguly, Anupam Gautam, Sandip Paul and Rupasri Ain**

Division of Cell Biology and Physiology, CSIR-Indian Institute of Chemical Biology, Kolkata.

**P42** SREBP1a Promotes Ovarian Cancer Cell Proliferation And Migration Through DRP1-Mediated Mitochondrial Fission

**Sk. Eashayan Tanbir and Sib Sankar Roy**

Cell Biology and Physiology Division, CSIR-Indian Institute of Chemical Biology, Kolkata.

**P43** Targeting vitamin-D3 (calcitriol) supplementation as a possible treatment regime to multiple sclerosis

**Preetam Modak**

Ramakrishna Mission Vidyamandira, Belur Math