The National Academy of Sciences, India

5, Lajpatrai Road, Prayagraj-211002, India

Monthly Summary for the month of May 2022





NASI continued to contribute to the 'Science & Society' as per its mandate, observing COVID appropriate behaviour during the re-spread of the coronavirus. The office of the Academy also followed the necessary orders of the govt. regarding the preventive strategies and norms, during the pandemic; however, several programmes were organised, as-

- 1. As a part of NASI's Science-Society Initiative and *Azadi ka Amrut Mahotsav*, Delhi Chapter of NASI is organizing a series of talks by Prof. Ajoy Ghatak on the topic, "The ten most beautiful experiments in Science". Next lecture of the series is being jointly organized by the NASI and Jaypee Institute of Information Technology (JIIT), Noida in online mode on 24th May, 2022 at 6 PM (for details a poster/brochure is enclosed herewith- Annex. 1).
- 2. NASI announced several Award Lectures in the memories of the deceased distinguished scientists; these are given after proper scrutiny and screening of the scientific contributions of the nominations received for the awards (a copy of the circular is enclosed herewith-Annex. 2).
- 3. Series lectures on 'Women in Science' were organized by the Delhi Chapter of the NASI (Details enclosed herewith, as Annex. 3 'a' & 'b').
- 4. A Science Awareness Programme, was organized by the Varanasi Chapter, in which lab training & demonstrations were given by the University teachers to the school students (a brief report is enclosed herewith Annex. 4).
- 5. Like every year, this year also, the Academy celebrated the National Technology Day. The technology day is celebrated in our country on 11th May every year to recall and reaffirm our faith in the technological advancements, achieved so far; as well as to spread the message among the students and general mass that how the technology is important for the overall development of 'science and society'. An online programme was organised on May 11, 2022 in which Eminent Scientists & Technologists shared their views about the India's recent developments in the field of "Science & Technology". Discussion was also focused on this year's theme "Integrated Approach in Science and Technology for Sustainable Future" (a copy of the programme is enclosed as Annex. 5). Some of the NASI-Chapters also celebrated the NTD.
- 6. NASI celebrated the International biodiversity day-2022 in a unique manner. Just on the eve of this day (i.e. on May 21, 2022), the Academy handed over the multidimensional, electronically equipped Brahmaputra gallery established by the NASI (with the financial support of the DST, GoI; and technical support of the NCSM), to the Govt. of Assam. The gallery will exist as the joint property of the NASI/DST & AWARMI; it was created with the support (infrastructure) of the 'Assam Govt.' in the premises of AWARMI, Guwahati in 2015; inaugurated by Dr Jitendra Singh, Hon'ble Minister for Sc. & Tech., GoI. The gallery is fully interactive having audiovisual information on biodiversity, socio-economic aspects, scientific aspects & explanations etc. about the whole biome of the Brahmaputra river-system (Annex. 6).

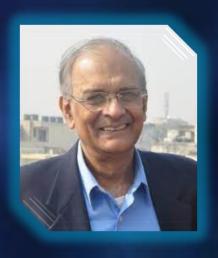


The Ten Most Beautiful Experiments in Science



On the Eve of the 75 years of Independence, the National Academy of Sciences, India (NASI) is celebrating Azadi Ka Amrit Mahotsav through different science and society initiatives. As part of NASI's science and society initiative, Delhi Chapter of NASI is organizing a series of talks by Prof. Ajoy Ghatak on the topic, "The ten most beautiful experiments in Science". Next lecture of the series will be jointly organized by the NASI and Jaypee Institute of Information Technology (JIIT), Noida in online mode on 24th May, 2022 at 6 PM.

ABOUT THE SPEAKER



Prof. Ajoy K Ghatak

More info. about the speaker

can be found at here.

Date & Time:
May 24, 2022 06:00 PM (IST)
Zoom link https:

https://us02web.zoom.us/j/ 88216484178?pwd=rR3Veb2 cpufV2hRLiE7XJPJ2XLS0Wn.1

Meeting ID: 882 1648 4178 Pass code: 296043

Link for YouTube Live Telecast:

https://www.youtube.com/c hannel/UCWgXoRptNM7cEgkxthRCFg Prof. Ajoy Ghatak formerly Professor at IIT Delhi, is currently President of the National Academy of Sciences (NASI). He received MSc from Delhi University and PhD from Cornell University. He is the recipient of many awards including CSIR Bhatnagar award for outstanding contributions in physical sciences, SPIE Educator award for unparalleled global contributions to fiber optics research and his tireless dedication to optics education worldwide, Esther Hoffman Beller Medal for outstanding contributions to optics education; OSI Amita De award for life long research contributions in the field of optics and dedicated service to the optics community, and ICO Galileo award. Most recently, he received the 2020 Sang Soo Lee Award "for his seminal role in the development of fiber optics and guided wave photonics and for pioneering optics educations in India."

Professor Ghatak nurtured the Fiber Optics Group at IIT Delhi and also master's program there. He organized numerous workshops and short courses and was President of Optical Society of India. He has published extensively in the general area of optical waveguides and quantum well structures. The methods developed by him have been used by many researchers. He is author of many books including textbooks on OPTICS (translated to Chinese and Persian); Fiber Optics and Optical Electronics (both co-authored with Professor Thyagarajan).

-: DESCRIPTION OF THE TOPIC :-

In 2002 Professor Robert Crease a philosopher and historian of science asked physicists to nominate the most beautiful experiment of all time. From that emerged a list of ten most beautiful experiments in science. Prof. Ghatak has written a book with the same title. In the book, he has tried to describe the physics of the ten experiments with the hope that young students will be able to appreciate the beauty and profoundness of each experiment. He has also discussed a few beautiful experiments with light and why (after the discovery of lasers) the study of light has become so very important. This talk will encourage students to perform a few experiments on their own. It's also expected to motivate teachers to make their class more interesting by sharing excitement of doing these experiments with their students.

Convener

Prof. Anirban Pathak anirban.pathak@jiit.ac.in

Prof. Papia Chowdhury papia.chowdhury@jiit.ac.in

To attend these talks and receive announcements of other talks of this series kindly fill the form https://forms.gle/ehFrhwYrEUxGLVJv6



The National Academy of Sciences, India (NASI)

5, Lajpatrai Road, Prayagraj - 211002, India

Prof. Madhoolika Agrawal

PhD, FNA, FNAAS, F.N.A.Sc.

Prof. J.R. Bellare

PhD, FNAE, FEMSI, FMAS ,FNASc

General Secretaries, NASI

May 6, 2022

Subject: Nominations for different "Academy Awards/Lectures/Medals"

Dear Fellows,

I request you to kindly send nominations for the following "Academy Awards/Lectures/Medals"-

- 1. Prof. Meghnad Saha Memorial Lecture Award (2022)
- 2. Prof. N.R. Dhar Memorial Lecture Award (2022)
- 3. Prof. Archana Sharma Memorial Lecture Award (2022)
- 4. Prof. M.G.K. Menon Memorial Award (2022)
- 5. Prof. M.G.K. Menon Lecture Award (2022)
- 6. Prof. V. P. Sharma Memorial Lecture Award (2022)
- 7. Prof. A.K. Sharma Memorial Lecture Award (2022)
- 8. Prof. Prafulla Chandra Ray Memorial Lecture Award (2022)
- 9. Prof. S.K. Joshi Memorial Lecture Award (2022)
- 10. Dr. P. Sheel Memorial Lecture Award (2022)
- 11. Prof. Saligram Sinha Memorial Lecture Award (2022)
- 12. Prof. R.C. Gupta Endowment History of Science Lecture Award (2022)
- 13. Prof. R.N. Tandon Memorial Lecture Award (2022)
- 14. Prof. B.K. Bachhawat Memorial Young Scientist Lecture Award (2022)
- 15. Prof. Shri Ranjan Memorial Lecture Award (2022)
- 16. Lecture Award in the field of Toxicology (2022)
- 17. Prof. Krishnaji Memorial Lecture Award (2022)
- 18. Dr. Mridula Kamboj Memorial Lecture Award (2022)

The nomination papers duly completed in all respect should be emailed to NASI on nasi.allahabad1@gmail.com latest by 15th June 2022. **No hard copy is required for this year;** kindly send the nomination on aforesaid email only (not on any other email id of NASI).

The copy of Regulations regarding these Academy Awards/Lectures/Medals and the names of past recipients are enclosed.

With regards,

Yours sincerely

(Madhoolika Agrawal)

Encl. - As above.

THE NATIONAL ACADEMY OF SCIENCES. INDIA

5, LAJPATRAI ROAD, PRAYAGRAJ - 211002, INDIA

Excerpts of the Regulations

A) 'Academy Awards/Lectures/Medals' to be held annually, as-

Prof. Meghnad Saha Memorial Lecture Award; Instituted by the Academy in the year 1981; Prof. Meghnad Saha Memorial Lecture may be held in any front line area in Physics and its applications (age- no bar).

Prof. N.R. Dhar Memorial Lecture Award; Instituted by the Academy in the year 1990; Prof. N.R. Dhar Memorial Lecture may be delivered in an area of Chemistry, preferably having an impact on

agriculture (age- no bar).

- Prof. (Mrs.) Archana Sharma Memorial Lecture Award; Instituted by the Academy in the year 2009 from the grant sanctioned by the DBT, New Delhi; Prof. (Mrs.) Archana Sharma Memorial Award Lecture may be delivered by the selected "Eminent Woman Scientist - irrespective of age
- iv) Prof. MGK Menon Lecture Award; Instituted by the Academy in the year 2015; Prof MGK Menon Lecture may be delivered by an active working Indian Scientist up to the age of 55 in any field of Science and Technology.
- v) Prof. MGK Menon Memorial Award; The Lecture Award would be given to an eminent Indian scientist for her/his contributions to any area of Science and Technology development, promotion popularization and application (age – no bar). vi) Prof. V. P. Sharma Memorial Lecture Award; Instituted by the Academy in the year 2016; Prof. V
- P Sharma Memorial Lecture may be delivered in the frontier areas of Biological Sciences (age-
- vii) Prof. A.K. Sharma Memorial Lecture Award; Instituted by the Academy in the year 2018; Prof. A.K. Sharma Memorial Lecture may be delivered by the selected "Eminent Plant Scientist, a researcher and an efficient manager of science" preferably below 70 years of age.

viii) Prof. Prafulla Chandra Ray Memorial Lecture Award; Instituted by the Academy in the year 2018; Prof. Prafulla Chandra Ray Memorial Lecture may be held in any front line area

in Chemistry and its applications (age - no bar).
ix) Prof. S.K. Joshi Memorial Lecture Award; Instituted by the Academy in the year 2021 from the endowment given by Dr. AV Rama Rao, former Director, IICT and CMD, AVRA Laboratories Pvt Ltd, Hyderabad. Prof. SK Joshi Memorial Lecture may be delivered by an Indian Scientist in any field of Science and Technology (age- no bar).

Prof. A.K. Sharma Memorial Lecture awardee will be given a gold medal, a citation and a cash award of Rs. 1 lakh (from the endowment given by the DBT, GOI). Prof. MGK Menon Memorial Award would carry an honorarium of Rs. 1 lakh with a Gold Medal. In all above remaining awards, each awardee will be given a gold medal, a citation and a cash award of Rs.50,000/-.

B) 'Academy Awards/Lectures/Medals' to be held on every alternate year. The following are to be held this year (2022):

- Dr. P. Sheel Memorial Lecture Award; Instituted by the Academy in the year 1988 from the endowment given by Mrs. Radhika Sheel.
- Prof. Saligram Sinha Memorial Lecture Award; Instituted by the Academy in the year 1990 from the endowment given by relatives and others associated with Prof. Saligram Sinha.
- Prof. R.C. Gupta Endowment History of Science Lecture Award; Instituted by the Academy in iii) the year 2000 from the endowment given by Prof. R.C. Gupta, Ganita Bharati Academy, Jhansi.
- Prof. R.N. Tandon Memorial Lecture Award; Instituted by the Academy in the year 2000 from the endowment given by the family and students of Late Prof. R.N. Tandon.
- Prof. B.K. Bachhawat Memorial Young Scientist Lecture Award; Instituted by the Academy in the v) year 2002.
- Prof. Shri Ranjan Memorial Lecture Award; Instituted by the Academy in the year 2002 from the endowment given by the relatives, friends and students of Late Prof. Shri Ranjan;
- Lecture Award in the field of Toxicology; Instituted by the Academy in the year 2002 from the endowment created from the savings of the 2nd Congress of Toxicology in Developing Countries organized by Industrial Toxicology Research Centre, Lucknow.
- viii) Prof. Krishnaji Memorial Lecture Award; Instituted by the Academy in the year 2005 from the endowment given by Prof. Abhai Man Singh and
- Dr Mridula Kamboj Memorial Lecture Award; Instituted by the Academy in the year 2016 from the endowment given by Prof. V. P. Kamboj.

The awardee, in Dr Mridula Kamboj Memorial Lecture will be given a medal, a citation and a cash award of Rs. 20,000/-. However, in all the remaining awards in category (B) as mentioned above, each awardees will be given a medal, a citation and a cash award of Rs. 10,000/-.

The subject areas for these various lectures are given as under-

- i) Dr. P. Sheel Memorial Lecture for making significant contributions in science & technology for social development with special reference to societal development may be delivered in any area like Health, Energy, Communication, Agriculture etc. provided that the award will not be repeated in the same area before nine years.
- ii) Prof. Salig Ram Sinha Memorial Lecture may be delivered in any front line topic in Plant Sciences with special reference to Plant Pathology.
- iii) Prof. R.C. Gupta Endowment History of Science Lecture may be delivered in any area encompassing History of Science.
- iv) Prof. R.N. Tandon Memorial Lecture may be delivered in any area in Plant Sciences.
- Prof. B.K. Bachhawat Memorial Young Scientist Lecture may be delivered in the area of Biological Sciences including Medical Sciences. The awardee scientist for Prof. B.K. Bachhawat Memorial Young Scientist Lecture award should be below the age of 40 years.
- vi) Prof. Shri Ranjan Memorial Lecture may be delivered in the area of Plant Molecular Biology.
- vii) Award Lecture in the field of Toxicology may be delivered in the area of Toxicology (in the broadest sense).
- viii) Prof. Krishnaji Memorial Lecture in the area of Experimental Physics and Instrumentation to an Indian citizen who has made commendable contributions in the area.
- ix) Dr Mridula Kamboj Memorial Lecture Award may be delivered in any area of Biomedical Sciences

General norms for holding the lectures

- i) Nominations for the aforesaid lectures will be made by the Fellows of the Academy. The awardees will be selected by the Council in accordance with the regulations as may be made from time to time.
- ii) The awardees will be called upon to deliver a lecture at a date, time and place as decided by the Council.
- iii) The awardee would be required to supply a written script of her/his lecture which the Academy would suitably publish.
- iv) The Academy shall bear the cost of travel of the awardee from her/his place of work/residence to the place of lecture and back as per rules of the Academy.

PAST RECIPIENTS OF THE AWARDS/LECTURES/MEDALS

Prof. Meghnad Saha Memorial Lecture Awardees

Prof. Govind Swarup, Radio Astronomy Centre, Tata Institute of Fundamental Research, Bombay

Prof. A.P. Mitra, Director-General, Council for Scientific & Industrial Research, New Delhi

Prof. M.G.K. Menon, 77, Lodi Estate, New Delhi

Prof. Virendra Singh, Director, Tata Institute of Fundamental Research, Mumbai

Prof. S.K. Joshi, Former Director General, CSIR, New Delhi

Dr. R. Chidambaram, Chairman, Atomic Energy Commission & Secretary, Department of Atomic Energy, Mumbai

Prof. T.V. Ramakrishnan, Deptt. of Physics, Indian Institute of Science, Bangalore

Prof. K. Kasturirangan, Director, National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore

Prof. Sushanta Dattagupta, Formerly Director, S.N. Bose National Centre for Basic Sciences, Kolkata

Prof. Bikash C. Sinha, Director, VECC & Saha Institute of Nuclear Physics, Kolkata

Prof. Ajay K. Sood, Chairman, Division of Physical & Mathematical Ściences, Professor, Department of Physics, Indian Institute of Science, Bangalore

Dr. Satinder Kumar Sikka, DAE Homi Bhabha Chair Professor, Bhabha Atomic Research Centre, Mumbai

Prof. Bimla Buti, Director, Centre for Science & Society, New Delhi.

Prof. Anil Kakodkar, Formerly Chairman, AEC, Flat no. 1104, Building no. 5, Accolade Cooperative Housing Society, Hajuri Dargah Road, Behind LIC, Tahane West, Mumbai

Dr. Sandip P. Trivedi, Director & Sr. Professor, TIFR, Mumbai.

Prof. Anurag Sharma, IIT Delhi, New Delhi

Dr. Srikumar Banerjee, Chancellor, Bhabha Atomic Research Centre, Mumbai

Prof. Ajoy K. Ghatak, Former Professor of Physics at IIT Delhi, New Delhi

Dr. N. Mukunda, Formerly Professor, Indian Institute of Science, Bangalore

Prof. V. Ram Gopal Rao, Director, IIT, Delhi, Hauz Khas, New Delhi

Prof. N.R. Dhar Memorial Lecture Awardees

Prof. R.C. Mehrotra, Professor Emeritus, Chemistry Department, University of Rajasthan, Jaipur

Dr. N.S. Randhawa, Former Director General, Indian Council of Agricultural Research, New Delhi

Prof. C.N.R. Rao, President, Jawaharlal Nehru Centre for Advanced Scientific Research, I.I.Sc. Campus, Bangalore

Prof. Rajinder Kumar, Department of Chemical Engineering, I.I.Sc., Bangalore

Prof. M.M. Sharma, Kothari Research Professor, J.N. Centre for Advanced Research, Mumbai

Prof. J.P. Mittal, Director, Chemistry & Isotope Group, Bhabha Atomic Research Centre, Trombay, Mumbai

Prof. Girjesh Govil, DAE-BRNS Senior Scientist, Department of Chemical Sciences, Tata Institute of Fundamental Research, Mumbai

Prof. C.L. Khetrapal, Director, Centre of Biomedical Magnetic Resonance, Sanjay Gandhi P.G. Institute of Medical Sciences, Lucknow

Dr. Anil Kumar, Scientist, Physical Chemistry Division, National Chemical Laboratory, Pune

Prof. Ashok Misra, Former Director, IITB, 68 Adarsh Vista, Basavan Nagar, Vibuthipura, Bangalore

Prof. Goverdhan Mehta, Honorary Professor and CSIR Bhatnagar Fellow, Department of Organic Chemistry, Indian Institute of Science, Bangalore

Dr. S. Swaminathan, Head, Polymer Chemistry Division, National Chemical Laboratory, Pune.

Prof. P. Balram, Professor (Emeritus), Molecular Biophysics Unit, Indian Institute of Science, Bangalore

Dr. R.A. Mashelkar, National Research Professor, NCL, Pune.

Dr. Madhu Dikshit, Director, CSIR-CDRI, Lucknow

Dr. A.K. Nangia, Director, National Chemical Laboratory, Pune

Prof. V. Chandrasekhar, Centre Director, TIFR Hyderabad, Hyderabad

Dr. Rakesh K Mishra, Director, CCMB, Hyderabad

Dr. Avesh K. Tyagi, Associate Director, Chemistry Group, BARC, Mumbai-400085

Prof. Archana Sharma Memorial Lecture Awardees

Prof. (Mrs.) Manju Sharma, Former Secretary, Govt. of India; President & Executive Director, Indian Institute of Advanced Research, Gandhinagar; Res. B9/6476 FF, Vasant Kunj, New Delhi-110070

Prof. Veena Tandon, Department of Zoology, North Eastern Hill University, Shillong

Prof. (Mrs.) Kasturi Datta, DBT Distinguished Biotechnology, Professor, School of Environmental Sciences, Adjunct Professor, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi

Prof. Mahtab Bamji, INSA Hon. Scientist, Dangoria Charitable Trust, Hyderabad

Prof. Chandrima Saha, Director, National Institute of Immunology, Aruna Asaf Ali Marg, New Delhi

Prof. Sneh Bhargava, Professor Emeritus and Formerly Director, AIIMS, New Delhi

Dr. Suchitra Banerjee, Chief Scientist, Plant Biotechnology Division, CSIR-CIMAP, Lucknow

Prof. Rohini M. Godbole, Centre for High Energy Physics, IISc, Bangalore.

Prof. Jaya Sivaswami Tyagi, AIIMS, New Delhi.

Dr. Nilima A. Kshirsagar, National Chair Clinical Pharmacology, ICMR, New Delhi

Prof. Paramjit Khurana, Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi

Dr. Subhra Chakraborty, Staff scientist-VII, NIPGR, Aruna Asif Ali Marg, New Delhi

Dr. K. Indira Priyadarsini, DAE, Raja Ramanna Fellow, UM-DAE Centre for Excellence in Basic Sciences, University of Mumbai, Mumbai

Prof. M.G.K. Menon Lecture Awardees

Prof. Balram Bhargava, Department of Cardiology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi – 110029

Dr. T.R. Sharma, Director, ICAR-National Research Centre on Plant Biotechnology, Pusa Campus, New Delhi

Dr. Ajay K. Parida, Director, ILS, Bhubaneswar

Dr. V. Ramgopal Rao, Director, IIT Delhi, New Delhi

Dr. Nikhil Tandon, Professor, Department of Endocrinology & Metabolism, AIIMS, New Delhi

Prof. Amit P. Sharma, Director, ICMR-NIMR, Sector-8, Dwaraka, New Delhi

Dr. Anil Bhardwaj, Director, Physical Research Laboratory, A Unit of Department of Space, Govt. of India, Ahmedabad

Prof. M.G.K. Menon Memorial Awardees

Prof. Govind Swarup, FRS, Former Director, NCRA/GMRT, TIFR, Pune

Prof. P N Tandon, President, National Brain Research Society, Manesar.

Prof. Manju Sharma, Former Secretary to GOI, New Delhi

Dr. K. Kasturirangan, Chairman, Raman Research Institute Council, Bangalore

Prof. C.N.R. Rao, Linus Pauling Research Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore

Prof. Vijayalakshmi Ravindranath, Director, Centre for Brain Research, Indian Institute of Science, Bangalore

Prof. Ashok Misra, NASI Platinum Jubilee Chair Professor at IISc Bangalore, Bengaluru

Prof. V.P. Sharma Memorial Lecture Awardees

Dr. Padmanaban Govindarajan, INSA Senior Scientist/Hon. Professor, Indian Institute of Science, Bangalore; Senior Science and Innovation Advisor, BIRAC, DBT, New Delhi

Dr. V.P. Kamboj, Chairman, BCIL, New Delhi

Dr. Neena Valecha, Director, ICMR-NIMR, New Delhi

Prof. Veena Tandon, NASI Senior Scientist Platinum Jubilee Fellow, Biotech Park, Lucknow

Dr. Ramesh Chand Dhiman, Senior Consultant, Former Scientist 'G'& ICMR-NIMR, Sector-8, Dwaraka, New Delhi

Dr. M.V. Padma Srivastava, Professor and Head, Department of Neurology, Chief, Neurosciences Center, AIIMS, New Delhi

Prof. A.K. Sharma Memorial Lecture Awardee

Prof. Asis Datta, Former NASI Platinum Jubilee Chair Distinguished Professor & Former Director, NIPGR, New Delhi

Prof. Sudhir K. Sopory, Formerly Vice Chancellor, JNU, New Delhi

Prof. Akhilesh K. Tyagi, Professor, Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi

Prof. Pramod Tandon, Former CEO, Biotech Park, Lucknow

Prof. Prafulla Chandra Ray Memorial Lecture Awardee

Prof. Animesh Chakravorty, Emeritus Professor, Indian Association for the Cultivation of Science, Kolkata

Dr. A.V. Rama Rao, Chairman & Managing Director, AVRA Laboratories, Hyderabad

Prof. Seyed Ehtesham Hasnain, Vice Chancellor and Professor, JH-IMM, Jamia Hamdard, Hamdard Nagar, New Delhi

Dr. Ved Prakash Kamboj, NASI Hon. Scientist, Biotech Park, Kursi Road, Lucknow-226021

Prof. S.K. Joshi Memorial Lecture Awardee

Prof. Man Mohan Sharma, Former Director, Institute of Chemical Technology (UDCT), Mumbai

Dr. P. Sheel Memorial Lecture Awardees

Dr. S.P. Gon Chowdhury, Deptt. of Science, Technology & Environment, Govt. of India

Dr. C.V. Seshadri, Director, Sri A.M.M. Muruqappa Chettiar Research Centre, Madras

Prof. G.S. Venkataraman, Director, DBT Centre for BGA Biofertilizer, School of Biological Sciences, Madurai Kamraj University, Madurai

Dr. N.H. Antia, Chairman & Director, Foundation for Research in Community Health, Mumbai

Dr. Ashok Jhunjhunwala, Head, Deptt. of Electrical Engineering, I.I.T., Chennai

Dr. Anil Joshi, Himalayan Environmental Studies and Conservation Organization, Village – Ghisarapalli, P.O. Nehuwala Via Majra, Dehradun (Uttaranchal)

Prof. Sneh Bhargava, Formerly Director, AlIMS, A-103, New Friends Colony, New Delhi - 110065

Dr. S. Ayyappan, Secretary, DARE & Director General, ICAR, New Delhi

Prof. Balram Bhargava, Department of Cardiology, AIIMS, New Delhi.

Dr. R. Balasubramanina, Director, Institute of Mathematical Sciences, Chennai

Dr. Renu Swarup, Secretary, Govt. of India, DBT, New Delhi

Prof. Bina Ravi, Senior Professor of Surgery and Chair, Integrated Breast Care Centre, AIIMS Rishikesh

Professor Saligram Sinha Memorial Lecture Awardees

Prof. K.S. Bilgrami, Head, PG Department of Botany, Bhagalpur University, Bhagalpur

Prof. (Mrs) Archana Sharma, CAS in Botany, University of Calcutta, Calcutta

Prof. Deepak Pental, Professor of Genetics and Director, Centre for Genetic, Manipulation of Crop Plants, University of Delhi, New Delhi

Prof. S.K. Sopory, I.C.G.E.B., Aruna Asaf Ali Marg, New Delhi

Prof. C. Manoharachary, Emeritus Scientist (CSIR), Department of Botany

Osmania University, Hyderabad

Prof. Pramod Tandon, Formerly V.C., NEHU; Professor, Deptartment of Botany, North Eastern Hill University, Shillong

Prof. Madhav D. Gadgil, Former Professor, IISc, Bangalore

Prof. Arun Kumar Pandey, University of Delhi, Delhi

Prof. K.V. Peter, Trustee, Federal Ashwas Trust, Kuruppacharil, TC-12/1309 Mullakkara, P.O. Mannuthy, Thrissur

Prof. R.C. Gupta Endowment History of Science Lecture Awardees

Prof. Deepak Kumar, Zakir Husain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi

Prof. B.V. Subbarayappa, Past President, IUHPS, KT-3, Apts. 301, 14th Cross,8th Block, Jaya Nagar, Bangalore

Dr. A.K. Bag, Advisor (History of Science), Indian National Science Academy, Bahadur Shah Zafar Marg, New Delhi - 110002

Prof. Rajesh Kochar, Formerly Director & Scientist, National Institute of Science, Technology and Development Studies (CSIR), New Delhi

Dr. P.P. Divakaran, Adjunct Professor, Chennai Mathematical Institute, Chennai

Prof. K. Ramasubramanian, Cell for Indian Science & Technology in Sanskrit, IIT Bombay, Mumbai.

Prof. H.Y. Mohan Ram, Formerly Professor of Botany, University of Delhi, Delhi.

Prof. P.N. Tandon, President, National Brain Research Centre, Manesar, Haryana.

Dr. Nitya Anand, Former Director, CDRI, Lucknow.

Prof. Satya Deo, Honorary Scientist, HRI, Allahabad

Prof. V.S. Ramamurthy, Emeritus Professor, National Institute of Advanced Studies, Bengaluru

Prof. R.N. Tandon Memorial Lecture Awardees

Prof. Anupam Varma, Dean & Joint Director (Edn.), Indian Agricultural Research Institute, New Delhi

Prof. H.N. Verma, Professor & Head, Department of Botany, Lucknow University, Lucknow

Prof. H.Y. Mohan Ram, Formerly Professor of Botany, D.U., 194, SFS DDA Flats, S.P. Mukherjee Nagar, Delhi

Dr. Paramvir Singh Ahuja, Directror, Institute of Himalayan Bioresource Technology, Palampur

Prof. Pramod Tandon, Vice-Chandellor, North-Eastern Hill University, Shillong

Prof. L.C. Rai, CAS in Botany, Banaras Hindu University, Varanasi

Prof. S.K. Sopory, Vice-Chancellor, Jawaharlal Nehru University, New Delhi

Prof. A.N. Purohit, Formerly Vice-Chancellor, HNB Garhwal University, Dehradun

Prof. Anil K. Tripathi, Director, CIMAP, Lucknow

Dr. Sanjay Kapoor, University of Delhi South Campus, New Delhi Dr. S.K. Barik, Director, CSIR-NBRI, Lucknow

Prof. B.K. Bachhawat Memorial Young Scientist Lecture Awardees

Dr. Pratima Srivastava, Scientist C, Pharmaco Kinetics and Metabolism Division, CDRI, Lucknow

Dr. Amita Gupta, Department of Biochemistry, University of Delhi, South Campus, Benito Juarez Road, New Delhi

Dr. Amit P. Sharma, Group Leader, Structural and Computational Biology Group, Internatioal Centre for

Genetic Engineering & Biotechnology, New Delhi **Dr. (Smt.) Saman Habib,** Scientist E-1, Division of Molecular & Structural Biology, Central Drug Research Institute, Lucknow

Dr. Ashish Arora, Scientist, Central Drug Research Institute, Lucknow

Dr. Mukesh Jain, Staff Scientist III, NIPGR, New Delhi

Dr. Anindita Ukil, Assistant Professor, Department of Biochemistry, University of Calcutta, Kolkata

Dr. Sanjeev Das, Staff Scientist V, National Institute of Immunology, New Delhi **Dr. Swarup Kumar Parida**, NIPGR, New Delhi

Dr. Timir Tripathi, Asst. Prof. (Selection Grade), Dept. of Biochemistry, North-Eastern Hill university, Shillong

Professor Shri Ranjan Memorial Lecture Awardees

Dr. L.M.S. Palni, Sr. Scientific Advisor-Biotechnology & Project Director, State Biotechnology Programme, U.S. Nagar, Uttarakhand

Prof. Jitendra Pal Khurana, Coordinator (UGC-SAP), Dept. of Plant Molecular Biology, University of Delhi South Campus, New Delhi

Dr. Sunil Kumar Mukherjee, Associate Scientist, Plant Molecular Biology Group, International Centre for Genetic Engineering & Biotechnology, New Delhi

Prof. Deepak Pental, Vice-Chancellor, University of Delhi, New Delhi

Prof. Akhilesh K. Tyagi, Director, NIPGR, New Delhi

Prof. Paramjit Khurana, Department of Plant Molecular Biology, University of Delhi South Campus, New Delhi

Prof. Madhoolika Agrawal, Department of Botany, BHU, Varanasi

Prof. L.C. Rai, BHU Distinguished Professor, BHU, Varanasi

Dr. Sanjay Kumar, Director, CSIR-Institute of Himalayan Bioresources Technology, Palampur

Award Lecture in the field of Toxicology

Dr. P.S. Chauhan, Formerly Head, Cell Biology Division, Emeritus Medical Scientist (ICMR), Biosciences Group, Bhabha Atomic Research Centre, Trombay, Mumbai

Prof. P.K. Seth, C.E.O. Biotech Park, Sector G, Jankipuram, Kursi Road, Lucknow

Prof. Alok Dhawan, Scientist Ell, Development Toxicology Division, Industrial Toxicology Research Centre, Lucknow

Dr. Devendra Parmar, Scientis F & Head, Developmental Toxicology Division, Indian Institute of Toxicology Research, Lucknow

Prof. Nikhil Tandon, Endocrinology & Metabolism Dept., AIIMS, New Delhi

Prof. K.C. Gupta, Director, Indian Institute of Toxicology Research, Lucknow

Prof. Pramod Garg, Dept. of Gastroenterology, AlIMS, New Delhi Dr. Aditya Bhushan Pant, Principal Scientist, CSIR-IITR, Lucknow

Dr. Mukul Das, Advisor, Shriram Inst. of Industrial Research, 19 University Road, Delhi

Prof. Krishnaji Memorial Lectrue Awardees

Prof. M.G.K. Menon, Adviser, iSRO, Department of Space, Govt. of India, K-5 (Rear), Hauz Khas, New

Prof. Suresh Chandra, NASI-Senior Scientist Platinum Jubilee Fellow, Physics Department, Banaras Hindu University, Varanasi

Pror. S.K. Joshi, NASI Platinum Jubilee Chair, National Physical Laboratory, New Delhi

Prof. M. Vijayan, Molecular Biophysics Unit, Indian Institute of Science, Bangalore

Prof. Govind Swarup, Formerly INSA Honorary Scientist & Director, NCRA/GMRT, Pune

Dr. K. Kasturirangan, Hon. Distinguished Advisor, ISRO

Prof. H.S. Mani, Adjunct Professor, Chennai Mathematical Institute, Chennai

Prof. Jayant Narlikar, Emeritus Professor, Inter-University Centre for Astronomy and Astrophysics, Pune University Campus, Pune

Dr. Mridula Kamboj Memorial Lectrue Awardee

Dr. MV Padma Srivastava, Professor of Neurology, AIIMS, New Delhi

Dr. Smita Dilip Mahale, Scientist G and Director, ICMR-National Institute for Research in Reproductive Health, Mumbai

Dr. Shally Awasthi, Professor and Head, Dept. of Pediatrics, KGMC, Lucknow

THE NATIONAL ACADEMY OF SCIENCES, INDIA 5, LAJPATRAI ROAD, ALLAHABAD – 211002, INDIA

PROFORMA FOR SUBMITTING NOMINATION FOR ACADEMY AWARDS/LECTURES/MEDALS

Name of The Academy Awards/Lectures/Medals:		
1.	Name of the Applicant :	
2.	Date and place of birth :	
3.	Present position & official address :	
4.	Positions held earlier :	
5.	Academic qualifications :	
6.	Details of any earlier award(s) received : (only give highlights of the work awarded)	
7.	 (i) Significant contributions made in the field of the Award (up to 2000 words): (ii) Summary of the most significant work in the area on which award is being claimed (up to 500 words): (iii) Impact of the contributions (not exceeding 75 words): 	
8.	List of publications connected with concerned study : (Enclose reprints of connected 5 research papers)	
9.	 (i) List of applicant's most significant publications in standard refereed journals only: (ii) List of papers presented in Conferences/Symposia/Seminars: (iii) List of the most outstanding Technical Reports/Reviews: 	
10.	List of patents taken, if any :	
11.	List of Technologies commercialized :	
12.	Details of books published (if any) :	
13.	Any additional information of relevance :	
Place :	Signature of the Fellow	
Date :	Name, Designation & Address	



WOWEN IN SCIENCE LECTURE SERIES



On the Eve of the 75 years of Independence, the National Academy of Sciences, India (NASI) is celebrating Azadi Ka Amrit Mahotsav through different science and society initiatives. As part of NASI's science and society initiative, Delhi Chapter of NASI and Jaypee Institute of Information Technology (JIIT, Noida) will jointly organize a series of lectures entitled, "Women in Science Lecture Series". All the lectures of this series will be delivered by the eminent Women Scientists. The lectures will be aimed to motivate young female students involved in UG, PG and PhD programs to continue science. All the talks will have two parts. In one part, the speaker will speak lucidly about her research works and the other part will be focused to inculcate confidence among the young students that even they can do top-class science and thus contribute to the society. Some practical problems that a growing scientist faces and how to circumvent those may also be discussed during the interaction sessions at the end.

Kindly make it convenient to join and encourage your students to actively participate in the discussion.

Lecture 4

About the speaker

She is an NMR spectroscopist, whose research is poised at the interface of Physics and Biology. Her current research interests include NMR Quantum Computing, Diffusion Studies using Gradient NMR, NMR of Nanomaterials, NMR Methodology Development and Biomolecular Structure and Dynamics Determination.

Title: Applications of NMR in Physics & Biology: Quantum Computing and Brain Cognitive Functions

Abstract:

NMR Spectroscopy is a versatile, sophisticated analytical tool that has found a myriad of applications in different fields of Science, including Physics, Chemistry, Biology, Environmental Science, Medical Diagnostics, Neuroscience, Materials Science and Geology, to name a few. This talk will begin with the fundamentals of the NMR phenomenon and give an overview of its various applications. I will also focus on two important and novel applications of NMR in studies of quantum computing and brain cognitive functions.

Dr. Kavita Dorai

Professor, Physical Sciences

More info. about the speaker can be found at

here.

Date & Time: May 13, 2022 04:00 (IST)

Zoom link https: https://us02web.zoom.us/j/84944350971?pwd=ek5KTjdpTndscjJ0S0VtNW9RaFpEQT09

Meeting ID: 849 4435 0971, Pass code: 310410

Convener

Prof. Anirban Pathak
anirban.pathak@jiit.ac.in

Prof. Papia Chowdhury
papia.chowdhury@jiit.ac.in

To attend these talks and receive announcements of other talks of this series kindly fill the form https://forms.gle/ehFrhwYrEUxGLVJv6



Women in Science Lecture Series



On the Eve of the 75 years of Independence, the National Academy of Sciences, India (NASI) is celebrating Azadi Ka Amrit Mahotsav through different science and society initiatives. As part of NASI's science and society initiative, Delhi Chapter of NASI and Jaypee Institute of Information Technology (JIIT, Noida) will jointly organize a series of lectures entitled, "Women in Science Lecture Series". All the lectures of this series will be delivered by the eminent Women Scientists. The lectures will be aimed to motivate young female students involved in UG, PG and PhD programs to continue science. All the talks will have two parts. In one part, the speaker will speak lucidly about her research works and the other part will be focused to inculcate confidence among the young students that even they can do top-class science and thus contribute to the society. Some practical problems that a growing scientist faces and how to circumvent those may also be discussed during the interaction sessions at the end.

Kindly make it convenient to join and encourage your students to actively participate in the discussion.



Dr. Chandrima Shaha

More info. about the speaker can be found at here.

Date & Time:
May 26, 2022 06:00 PM (IST)
Zoom link https:

https://us02web.zoom.us/j/ 86324585099?pwd=SN3LCkT K-FiuKaWyT3yvEflsIGb_po.1

Meeting ID: 863 2458 5099 Pass code: 979077

Link for YouTube Live Telecast:

https://www.youtube.com/c hannel/UCWgXoRptNM7cEgkxthRCFg

Lecture 5

About the speaker

Dr. Chandrima Shaha is a biologist, President of the Indian National Science Academy, the premier body of science in India and JC Bose Chair Distinguished Professor at the Indian Institute of Chemical Biology at Kolkata. She is also the Former Director of the National Institute of Immunology, New Delhi. Her research interests' centres around the elucidation of the processes that influence cell death programs under varying physiological conditions in diverse organisms. She is an elected fellow of the World Academy of Sciences and fellow of all three Science Academies of India. She served as a member in the Councils of all three National Academies. Notable awards include the Ranbaxy Science Foundation Award for basic sciences; the J.C. Bose Fellowship; Shanti Swarup Bhatnagar Medal of INSA; Om Prakash Bhasin Award; Archana Sharma Memorial Award; DarshanRanganathan Memorial Award; Chandrakala Hora Memorial Medal and the Shakuntala Amir Chand Prize.

Improving engagement in science: the challenge

Abstract:

Engagement in science for both men and women is important in the context of increasing the scientific manpower. This is essential for the developmental goals of a country. Engagement for women in particular is important because the number of women involved in science is far less although they form half of the society. Brilliant examples of women scientists abound and they have succeeded as scientists, doctors and entrepreneurs. Such role models are an inspiration for the future generation. There are encouraging data to support that women participation in science has increased in India in the recent past, however, critical examination of persistent problems is required to understand what needs to be done. More men and women involved in science will mean more scientific manpower in general.

Convener

Prof. Anirban Pathak anirban.pathak@jiit.ac.in

Prof. Papia Chowdhury papia.chowdhury@jiit.ac.in

To attend these talks and receive announcements of other talks of this series kindly fill the form https://forms.gle/ehFrhwYrEUxGLVJv6



राष्ट्रीय विज्ञान अकादमी, भारत (नासी)-वाराणसी चैप्टर, हाल के दिनों में स्कूली छात्राओं के लिए विभिन्न विज्ञान जागरूकता और प्रेरक कार्यक्रम आयोजित करता रहा है। कार्यक्रम का उद्घाटन नासी (NASI)-वाराणसी चैप्टर, की चेयरपर्सन प्रो. मधुलिका अग्रवाल ने किया। प्रो. मधुलिका अग्रवाल ने इस राष्ट्रीय मंच के उद्देश्यों और युवा छात्राओं के बीच वैज्ञानिक और तकनीकी ज्ञान और जागरूकता को बढ़ावा देने के लिए अकादमी द्वारा किए जा रहे प्रयासों के बारे में विस्तार से बताया। प्रो. अग्रवाल ने नवोदित बालिका वैज्ञानिकों के बीच विज्ञान को रोजगार के रूप में अपनाने के लिए उतसहित करने में अकादमी की भूमिका के बारे में बताया, जो NASI के इस तरह के समर्थन और प्रयासों से भविष्य में बेहतर कर सकते हैं। एमएमवी, बीएचयू से प्रो. नीलम श्रीवास्तव ने बताया कि यह कार्यक्रम किस प्रकार युवा महिलाओं को बुनियादी विज्ञान में उच्च अध्ययन के लिए अपने भविष्य की योजना बनाने में मदद, प्रेरित और प्रोत्साहित करेगा। इस अवसर पर जीवविज्ञान विभाग के प्रख्यात वैज्ञानिक, प्रो जे के रॉय और भौतिकी विभाग, बीएचयू के प्रो0 अभय कुमार सिंह द्वारा व्याख्यान दिए गए। प्रो. रॉय ने छात्रों को जेनेटिक्स और कैंसर अनुसंधान की दुनिया से परिचित कराया और इस क्षेत्र में एक मील का पत्थर साबित हुई खोंजों की जानकारी दी; इस कार्यक्रम में वाराणसी और पूर्वी उत्तर प्रदेश के ९ सरकारी स्कूलों से ५८ छात्राओं ने भाग लिया जिनको NASI टीम द्वारा फरवरी में आयोजित प्रतिस्पर्धा के आधार पर लगभग 800 छात्रों में से चुना गया था। सत्र का संचालन NASI टीम के सदस्यों प्रो. ऋचा रघुवंशी, डॉ. शैलजा एस. सुनकारी और डॉ. गौतम गीता जीवात्रम के सहयोग से किया गया।

THE NATIONAL ACADEMY OF SCIENCES, INDIA



'National Technology Day' celebrations

Theme: "Integrated Approach in Science and Technology for Sustainable Future".

---- Tentative Programme (online) -----

WEDNESDAY, MAY 11, 2022

11.30 am = 1.00 pm

Web link: https://nasi.webex.com/nasi/j.php?MTID=m370ae66c02a5f3b14f0bd746fc164bc6

Welcome (05 min)

: Prof. Madhoolika Agrawal, General Secretary (HQ), NASI

Inaugural Address (15 min)

: Prof. Manju Sharma, former Secretary, DBT, Govt. of India;

and Past President, NASI

Keynote Address (30 min)

: Prof. V P Kamboj, Past President, NASI

(Prof. Prafulla Chandra Ray Memorial Lecture Award -2021)

Theme Address (20 min)

: Dr. Renu Swarup, former Secretary, DBT, Govt. of India

Presidential Remarks (10 min): Prof. Anurag Sharma, Officiating President, NASI

Concluding Remarks (05 min) : Prof. J.R.Bellare, General Secretary (OS), NASI

Vote of thanks

: Dr. Niraj Kumar, Executive Secretary, NASI



National Technology Day (NTD)-2022 Celebration Organized by







K. C. College of Engineering & Management Studies & Research, Thane

Wednesday, 11th May, 2022 at 13:00-16:00 hrs **Programme Schedule**

13:00 hrs	Welcome Address: Dr Vilas Nitnaware, Principal, K.C.College of Engineering & Management & Research, Thane. Opening Remarks: Prof AK Singh, Chairman, NASI-MC.
Technical S	ession-1: Chair:Prof A K Singh
13:30	Prof Narendra Shah (Member Secretary, Rajiv Gandhi Science & Technology Commission, Govt of Maharashtra, Mumbai).
14:00	Prof Sahana V. Murthy (Professor in Interdisciplinary Programme in Educational Technology, IIT Bombay)
Technical S	ession-2: Chair: ProfK P Mishra
14:30	Dr Om Shrivastav (Jaslok Hospital & Research Centre, Mumbai)
15:00	Dr H S Misra (Molecular Biology Division, BARC Mumbai)
Technical S	ession-3: Chair: Prof S Mazumdar
15:30	Dr Puja Rai Pradhan (COO, KC College of Engineering & Management & Research, Thane)
16:00	Discussion: Technology Intervention Challenges and Opportunities in S&T Education.
16:30	Vole of thanks: Prof P A Hassan (Secretary, NASI-MC)

Venue: K.C. College of Engineering & Management Studies & Research, Thane (E) ALL ARE CORDIALLY WELCOME

Please join using the **Zoom**link given below: https://zoom.us/j/94496279140?pwd=Rit0emJwL0VaaGJqc0xvMUZ2RDI4QT09

Meeting ID: 944 9627 9140 & Passcode: 157333

CONTACT:

NASI-MC: hassan@barc.gov.in

Venue: principal@kccemsr.edu.in



राष्ट्रीय विज्ञान अकादमी, भारत (नासी)-वाराणसी चैप्टर, हाल के दिनों में स्कूली छात्राओं के लिए विभिन्न विज्ञान जागरूकता और प्रेरक कार्यक्रम आयोजित करता रहा है। कार्यक्रम का उद्घाटन नासी (NASI)-वाराणसी चैप्टर, की चेयरपर्सन प्रो. मधुलिका अग्रवाल ने किया। प्रो. मधुलिका अग्रवाल ने इस राष्ट्रीय मंच के उद्देश्यों और युवा छात्राओं के बीच वैज्ञानिक और तकनीकी ज्ञान और जागरूकता को बढावा देने के लिए अकादमी द्वारा किए जा रहे प्रयासों के बारे में विस्तार से बताया। प्रो. अग्रवाल ने नवोदित बालिका वैज्ञानिकों के बीच विज्ञान को रोजगार के रूप में अपनाने के लिए उतसहित करने में अकादमी की भूमिका के बारे में बताया, जो NASI के इस तरह के समर्थन और प्रयासों से भविष्य में बेहतर कर सकते हैं। एमएमवी, बीएचयू से प्रो. नीलम श्रीवास्तव ने बताया कि यह कार्यक्रम किस प्रकार युवा महिलाओं को बुनियादी विज्ञान में उच्च अध्ययन के लिए अपने भविष्य की योजना बनाने में मदद, प्रेरित और प्रोत्साहित करेगा। इस अवसर पर जीवविज्ञान विभाग के प्रख्यात वैज्ञानिक, प्रो जे के रॉय और भौतिकी विभाग, बीएचयू के प्रो0 अभय कुमार सिंह द्वारा व्याख्यान दिए गए। प्रो. रॉय ने छात्रों को जेनेटिक्स और कैंसर अनुसंधान की दुनिया से परिचित कराया और इस क्षेत्र में एक मील का पत्थर साबित हुई खोंजों की जानकारी दी; इस कार्यक्रम में वाराणसी और पूर्वी उत्तर प्रदेश के ९ सरकारी स्कूलों से ५८ छात्राओं ने भाग लिया जिनको NASI टीम द्वारा फरवरी में आयोजित प्रतिस्पर्धा के आधार पर लगभग - 800 छात्रों में से चुना गया था। सत्र का संचालन NASI टीम के सदस्यों प्रो. ऋचा रघुवंशी, डॉ. शैलजा एस. सुनकारी और डॉ. गौतम गीता जीवात्रम के सहयोग से किया गया।

BRAHMAPUTRA GALLERY ESTB. BY NASI/DST AT GUWAHATI





HANDING OVER THE BRAHMAPUTRA GALLERY TO THE GOVT. OF ASSAM

NASI celebrated the International biodiversity day-2022 in a unique manner. Just on the eve of this day (i.e. on May 21, 2022), the Academy handed over the multidimensional, electronically equipped Brahmaputra gallery established by the NASI (with the financial support of the DST, GoI; and technical support of the NCSM), to the Govt. of Assam. The gallery will exist as the joint property of the NASI/DST & AWARMI; it was created with the support (infrastructure) of the 'Assam Govt.' in the premises of AWARMI, Guwahati in 2015, inaugurated by Dr Jitendra Singh, Hon'ble Minister for Sc. & Tech., GoI. The gallery is fully interactive having audiovisual information on biodiversity, socio-economic aspects, scientific aspects & explanations etc. about the whole biome of the Brahmaputra river-system.







A Panoramic view of the gallery