



Proceedings of AICTE sponsored National Conference on 'Complex Diseases, Novel Therapeutics & Delivery Challenges' 2014

Avik Das*, B.Pharm, M.S (USA)

Assistant Professor, Department of Pharmacology, Gupta College of Technological Sciences, Asansol, West Bengal, India

*Correspondence: avik.tox@gmail.com; Tel.: +919748207856

Gupta College of Technological Sciences (GCTS), Asansol, once again became the proud host of a national conference on 'Complex Diseases, Novel Therapeutics & Delivery Challenges' on its campus here at Asansol during January 23-24, 2014. The program was funded by AICTE, New Delhi. The unique conference provided a platform for pharmaceutical scientists to discuss important international breakthroughs in drug discovery and new therapeutics keeping in focus the central motto of the program. The scientific community attending the summit consisted of a diverse group of representatives from both academia and industry sharing their latest research & developments before a gathering of literary luminaries in the field. The scientific sessions consisting of both oral and poster presentations were staged at AJC Bose Hall of the Institute. The list of presenters included bigwigs from academia like Prof. (Dr.) Tarun Jha from Dept. of Pharmaceutical Technology, Jadavpur University, Kolkata. Dr. Swastika Ganguly, Associate Professor, BIT, Meshra, Ranchi and Prof. (Dr.) Pintu De, HOD, Dept. of Pharmaceutics, B.C. Roy College of Pharmacy & Allied Health Sciences. It also included scientific personnels from industry like Piyali Datta Chakraborty, Scientist, Albert David Ltd., Kolkata and eminent scientists from CSIR labs like Dr. Nahid Ali, Chief Scientist, Infectious Diseases & Immunology Division, IICB, Kolkata. The enriching pieces of speech were followed by an illustrative poster session staged by the students of GCTS as well as students from other colleges across the state.

The program started with the inauguration of the abstract CD in the gracious presence of dignitaries including Prof. (Dr.) Kalyan Kumar Sen, Principal, GCTS, Dr. Jyotirmoy Lahiri, Registrar, GCTS and CA Debashish Banerjee. Kindling of the inaugural lamp announced the opening of the program in the melodious backdrop of the opening song presented by Mr. Arjun Kumar Sen. All the dignitaries on stage presented succinct speeches describing the motto of the program. Dr. Lahiri in his speech spoke about the different strategies followed in the medical field in recent times for the eradication of complex medical threats like use of stents in angioplasty and fore so. Mr. Debashish Banerjee, distinguished chartered accountant of Asansol, also delivered a thanksgiving speech on the occasion.

(The plenary lectures began a few minutes after tea. The first session was that of Dr. Nahid Ali from IICB, Kolkata. The proclaimed scientist spoke about the use of liposomal drug delivery system in the treatment of visceral Leishmaniasis. Although Leishmaniasis or Kala azar as it is popularly known had long been thought to be erased out of the Indian soil by the untiring efforts of Dr. U.N. Bramhachari, latest survey reports from the health department suggest emergence of resistant strains and also incidence of newer forms of the disease like PKDL. She through scientific evidences advocated the use of drug free liposome or in combination with the standard drug sodium antimony gluconate for gaining comparable therapeutic efficacy as treatment options for such cases.

The lecture of Dr. Ali was followed by the session of Dr. Piyali Datta Chakraborty, Scientist, Albert David, Kolkata who spoke of the signature product of their company 'Placentrex', which is a purified extract from the placenta of the newborn. Placenta which is the biological life line of the baby in the mother's womb consists of a wide array of biological substances which are known to have immense therapeutic potential. Besides, this biological treasure house also serves as a rich source of pluripotent stem cells which may help in the repair mechanism of the body. In her talk here, Dr. Chakraborty emphasised specially on the use of the aqueous extract of placenta in the treatment of non healing wounds and also advocated its

usage in surgical dressings and burn injuries. She spoke about the different techniques for the commercial production of 'Placentrex' and also discussed shortly about the probable mechanism of action of the product. She also threw light on the benefits of adding proteolytic enzymes in proportionate quantity to the extract to gain a synergistic effect in the process of wound healing. The session indeed opened up before the audience a new idea which in near future is envisaged to become a torchbearer in the field of pharmacotherapeutics i.e. pharmacobiotech.

After lunch break there was another interesting session presented by Dr. Pintu De from Dept. of Pharmaceutics, Dr. B.C Roy College of Pharmacy. Dr. De gave a talk on 'The Role of Mango Leaf in The Management of Diarrhoea'. He threw light on the epidemiology of diarrhoea both globally and in the Indian scenario thus justifying the rationale behind searching an alternative treatment option for diarrhoea. He through standard scientific evidences showed that both the aqueous and methanolic extracts of the leaves, have activity against six gram negative bacteria five of which are reported to be a player in the aetiology of diarrhoea. Following oral presentations, there was a poster session where faculties and students from both GCTS and other Institutions from all over the state presented the proceedings of their work. The eventful day had a melodious conclusion with the students and faculty of Gupta College jointly staging a cultural programme.

The second day opened up with a vibrant oral session from Dr. Swastika Ganguly, Assoc. Professor, Department of Pharmaceutical Technology, BIT, Meshra, Ranchi. She spoke on the newer molecular targets for anti HIV drugs (Non nucleoside reverse transcriptase inhibitors). Her talk was focussed mainly on the spontaneous structural modification taking place in NNRTIs in response to viral mutations thus broadening their spectrum of affinity. She also spoke about two new NNRTIs with this type of optimum flexibility which has entered the clinical phases in recent times.

The last of the plenary lectures was that of Dr. Tarun Jha from Dept. of Pharmaceutical Technology, Jadavpur University, Kolkata. He gave a talk on various aspects of Drug Designing. His speech covered many facets of this important part of drug discovery which ranged from reasons behind compound failure to modern tools availed in recent times to optimize the process of discovery and development. He briefly discussed his personal experiences on the issue zeroing on specifically in QSAR. He also presented in a lucid manner the main theme of Free Wilson Model which was the first documented attempt to quantify biological effects in the light of chemical structure of molecules. He also discussed the principles of prediction of biological activity of compounds not yet synthesized based on the substituent groups added. The take home message from his presentation was that the mathematical modelling of biological activity of chemical moieties has emerged as a powerful tool in drug discovery in recent times.

The valedictory session began with the prize distribution ceremony. A panel of experts adjudged the scientific poster session and five best papers each from the research and review category were awarded. The program had a neat conclusion with a cordial vote of thanks by Prof. (Dr.) Kalyan Kumar Sen which began with the acknowledgement of the reverend patronage of Prof. Debesh Chandra Majumdar, Hon'ble Chairman, Trinity Trust, Asansol. The two day long gala event was indeed a highly enlightening one which got appreciation from a wide array of literary luminaries and we the members of the family of the GCTS look forward to host such programme every year to rekindle the flame of scientific knowledge in the inquisitive heart of the budding scientists of the future.