



R e p o r t o f

TWO DAY NATIONAL CONFERENCE ON PARTICLE TECHNOLOGY WITH SPECIAL EMPHASIS ON NANOTECHNOLOGY

22nd - 23rd April 2011

Jointly organized by
PARUL INSTITUTE OF PHARMACY
&
BARODA COLLEGE OF PHARMACY

A two day national conference on "Particle technology with special emphasis on nanotechnology" was organized jointly by Parul Institute of Pharmacy and Baroda College of Pharmacy on 22nd-23rd April 2011 at Auditorium, Parul campus, Limda, Vadodara.

The emerging fields of nanoscience and nanotechnology are enabling control of the material world at the scale of atoms and molecules, potentially producing material with fundamentally different properties and behavior. Studying nanotechnology now is equivalent to studying the novel drug delivery system in the 90's. However, there is much yet to discover. The program focused on various areas of particle technology, with a motive to enrich the minds of young researchers. The brochure containing the information regarding the program is enclosed as annexure.

Around 350 participants within and outside Gujarat, including teaching fraternity and students attended the conference. There were total nine lectures of the eminent speakers in the two days conference.

The inaugural function of the two days program was held on 22nd April, 2011 at 10.00 a.m.

Dr. Chaitanya Dutt, Director -research and development, Torrent Research Centre, Ahmedabad. was the Chief guest for the program. **Dr. Jayesh K Patel**, Chaiman, Parul trust and **Dr. Devanshu J. Patel**, Managing trustee, Parul trust were the Chief Patrons. **Dr. B. G. Rathore**, Campus Director, Parul Trust, **Dr. Rajesh KS**, Principal, Parul Institute of Pharmacy, **Dr. Archana Paranjape**, Principal, Baroda College of Pharmacy were also present at the function.

The other distinguished guests present in the program were **Prof. S. P. Vyas**, Department of Pharmacy, HS Gaur Vishwavidyalaya Sagar, MP., **Prof. Rakesh Sharma**, Additional director and Head, CBRN Defense INMAS, New Delhi, **Prof. M. R. Yadav**, Head, Pharmacy Dept, M. S. University of Baroda, **Dr. R. Mashroo**, Professor, Pharmacy Dept, M. S. University of Baroda. **Dr. Vandana Patel**, PG Director, Baroda college of Pharmacy, **Dr. S. S. Pancholi**, Principal, Babaria Institute of Pharmacy, **Dr. T. Y. Pasha**, Principal, Pioneer Institute of Pharmacy, **Prof. U. Upadhyay**, Principal, Sigma Institute of Pharmacy, **Prof. I. Roy**, Department of Chemistry, University of Delhi.

The Inaugural Program hosted by M Pharm students, Parul Institute of Pharmacy, was started with brief introduction of the program. It was followed by the lighting of the lamp by dignitaries and Saraswati prayer by M. Pharm Students.

The program continued with floral welcome to all dignitaries, **Dr. Rajesh K.S.** Principal PIPH and **Dr. Archana Paranjape** Principal BCP gave the welcome address to all the dignitaries, delegates and participants. This was followed by the presidential address given by Dr. Devanshu Patel, Managing trustee, Parul trust. It was followed by the speech of the chief guest **Dr. Chaitanya Dutt**, Director-research and development, Torrent Research Centre, who focused on need of innovation in the field of new drug delivery systems and the role of academics for the same. The inaugural program was concluded with vote of thanks, by **Mrs. Lalit Lata Jha**, coordinator of the conference.

The first scientific session began at 10:30 am by **Prof. M.R. Yadav** as chairperson. The first topic of the session was "Nanotechnology for colloidal carriers in site directed drug delivery" by **Prof. S. P. Vyas**. He focused on the Choice of carrier system to be used in drug targeting strategies, pH sensitive liposome, Endosomes and Delivery of DNA in to the cells. The session ended with clarification of the doubts.

The second session continued with informative lecture presented by **Prof. K. K. Singh**, on targeting antiretroviral drug to HIV reservoirs: Exploring the potential of nanocarriers. She discussed the improved bioavailability and solubility profile after nanonization of navirapine.

A simultaneous session of poster competition based on original research work was conducted. The theme for the competition was nanotechnology with special emphasis on nanoparticles (formulation, evaluation and applications). The posters were judged by **Prof. K. K. Singh** and **Prof. R. S. R. Murthy**. The judges appreciated and stressed the importance of research at academic level so as to develop the research skill in young researchers. Announcement of results and prize distribution was done after scientific sessions on the same day. The first prize was shared by **Dipti Gohil**, Pioneer College of Pharmacy, and **Prerak Patel**, Nirma University. The second prize was shared by **Rashida Ansari**, Parul Institute of Pharmacy and **Kamlesh Solanki**, Ananad Pharmacy College. The third prize was shared by **Divyen Shah**, SVKM's NMIMS, Mumbai, and **Nisha Ajmeri**, Parul Institute of Pharmacy.

The post lunch session was chaired by **Prof S. P. Vyas**. **Prof. A. N. Mishra** shared his expertise on the challenges in pulmonary delivery of siRNA. He discussed about the challenges to pulmonary drug administration and barriers to siRNA delivery to the lung.

In next scientific session, **Prof. R. S. R. Murthy** presented his talk on tumor targeting through nanoparticles: Strategies and Methods. He gave an elaborate explanation about targeting nanoparticles to mitochondria and use of bi-phosphonates as ligand for bone targeting.

The Program continued after tea break, chaired by **Prof. R. S. R. Murthy** and with expert lecture of **Dr. J. N. Verma** on his innovative formulation FUNGISOME (Liposomal Amphotericin B) and its use as nephro-safe antifungal for the treatment of systemic mycosis. The vibrant session ended with active interaction between the speaker and audience.

The last event of the day was panel discussion on the topic NDDS Vs Conventional Dosage forms. The session was moderated by Prof. R. S. R. Murthy. Speakers in both the groups argued to establish the importance of respective dosage forms. The session was concluded by Prof. R. S. R. Murthy, noting the importance of both types of dosage forms in therapy.

The second day of the conference started with the first scientific session, chaired by **Prof. Rakesh Sharma**. He introduced and handed over the mike to Prof. I Roy, the first speaker of the session. **Prof. Indrajit Roy** discussed about the role of nanomedicine in new generation diagnostics and therapeutics. He introduced the audience with several new concepts in diagnostics like, theranostics.

The next speaker of the session was **Prof. Pratim Chattaraj**, Head, Department of Chemistry, IIT, Kharagpur. The topic of his talk was All-metal aromaticity and conceptual DFT. It was an interesting and useful shift from Pharmaceuticals to chemistry, imposing the interdependency of various subjects for new innovations.

The proceedings paused for a Lunch Break. The Post lunch session was started by the chairman of the session **Dr. Mahesh Chhabaria**, Associate Professor, Department of pharmaceutical chemistry, L.M. College of Pharmacy. He welcomed and introduced the first speaker Prof. Rakesh Sharma. He discussed the imaging of nanoparticles. He explained the basic concept of pharmacoscintigraphy and presented few studies carried out at INMAS. The second topic of the session was presented by Prof. Pratim Chattaraj regarding toxicity of metallic clusters.

The program ended with feedback form various participants. They thanked the organizers especially for the punctuality and good conduct of the program and appealed to conduct more such programs in future. The Conference was concluded by **Prof. Prafulla Sabale** with a vote of thanks. The program ended at 3.00 pm in the afternoon.

REGISTRATION



A warm welcome to Guests



Dignitaries at High Tea



Welcome note by Dr. Rajesh K. S., Principal, Parul Institute of Pharmacy.



Presidential address by Dr. Devanshu Patel



A floral felicitation to Dr. Rajesh K. S. by Mrs. Sona P. S.



Dr. Archana Paranjape giving a brief introduction of the conference



Prayer By M.Pharm Students



Lighting the lamp by Chief Guest, Dr. Chaitanya Dutt, Director, R & D, Torrent Research Center, Ahemdabad.



Dignitaries & Participants of the National Conference