



A society for research, awareness and social development


A webinar on

HPTLC: Principles and Applications in Pharmacology, Phytochemistry and Environmental Sciences

Co-Organized by

**Save the Environment (STE),
Kolkata, West Bengal**

**Anchrom Enterprises (India) Pvt. Ltd,
Mumbai**



Save the Environment (STE), is an NGO actively organizing various interactive sessions such as conferences (National and International), workshops, seminars and awareness programs including poster competitions, quiz competitions and science exhibitions among the future generations. In the past few months, the COVID-19 pandemic has put several organizations to a halt for organizing such activities. Thankfully, in today's world of technology the webinars have provided us a platform to actualize interactive sessions which could enable dissemination of knowledge and awareness in the fields related to health, water and environment.

With this perspective, STE in collaboration with Anchrom Enterprises (India) Pvt. Ltd., Mumbai, a webinar was entitled “**HPTLC: Principles and Applications in Pharmacology, Phytochemistry and Environmental Sciences**” was conducted on 15 June, 2020. The main objective of the webinar was to highlight the basics of chromatography; the technological advances in High Performance Thin Layer Chromatography (HPTLC) and; its applications in the field of pharmacology, phytochemistry and environmental sciences. Thus, emphasizing the significance of HPTLC applicability in life sciences.

Anchrom Enterprises (I) Pvt. Ltd. is one of India's oldest companies in analytical instruments supply. It is dedicated to the technique of TLC and HPTLC since 1978. The organization has provided HPTLC technology to numerous public/private and Government

institutions and research centers including pharmaceutical, agricultural, natural product and environment related. The company voluntarily offers free training on HPTLC and supports researchers with subsidized analysis.

The webinar began with a warm welcome note and brief introduction on the contributions and progress accomplished by STE which were delivered by **Ms. Jigni Mishra**, organizing member, STE. The event was graced by the presence of our Honorable' panelists: **Dr. Anubhuti Pasrija**, Principal Scientist (DRDC-Analytical) at Dabur India, Pvt. Ltd. and **Dr. Sayeed Ahmad**, Assistant Professor, Department of Pharmacognosy and Phytochemistry, Faculty of Pharmacy, Jamia Hamdard University, New Delhi.



Dr. Anubhuti Pasrija



Dr. Sayeed Ahmad

Our Honorable' panelists: Dr. Anubhuti Pasrija, Principal Scientist (DRDC-Analytical) at Dabur India, Pvt. Ltd. and Dr. Sayeed Ahmad, Assistant Professor, Department of Pharmacognosy and Phytochemistry, Faculty of Pharmacy, Jamia Hamdard University, New Delhi.

Dr. Anubhuti Pasrija is currently leading the analytical group (Ayurveda & Healthcare) and constantly providing inputs with regard to standardization & method development for medicinal plants, herbal extracts & herbal formulations at Dabur India, Pvt. Ltd. Her expertise in characterization of lead molecule; standardization of medicinal plants, herbal extracts and herbal formulations based on analytical marker/bio-active compounds analysis or chromatographic fingerprinting using different chromatographic methods with the help of modern sophisticated chromatographic tools like HPTLC, HPLC, GC, UV etc. and

spectroscopic techniques. She has various publications on development and validation of analytical methodology for medicinal plants, herbal extracts and herbal formulations by the virtue of her proficiency in Pharmacology and Pharmacognosy processes.

Dr. Sayeed Ahmad has been associated in teaching and research since 2005, in the field of herbal drugs and natural products. His work on chromatography especially on HPTLC is well recognized with more than 70 research papers published on HPTLC only; which is third highest number of publications on HPTLC globally as per SCOPUS data. He has attained the topmost position as a publisher on HPTLC in India.



Ms. Sneha Singh



Mr. Vishwajit Kale

Our speakers for the webinar: Ms. Sneha Singh and Mr. Vishwajit Kale; both are Application Chemists at Anchrom Enterprises (I) Pvt. Ltd.

The speakers for the webinar were **Ms. Sneha Singh** and **Mr. Vishwajit Kale**, who are Application Chemists at Anchrom Enterprises (I) Pvt. Ltd. The speakers presented the fundamentals of chromatography and the basic components of HPTLC instrumentation while highlighting the science behind the technique. They also emphasized on the advantages of the HPTLC such as its rapidness, simplicity, cost-effectiveness and flexibility. They described the HPTLC technique as a “visible” technique which can analyze in parallel more than 100 samples. The technique of HPTLC was also explained as several times faster, contamination-free and economical than High Performance Liquid Chromatography (HPLC); another liquid

chromatography technique. The speakers very well illustrated the analyses of different samples like pharmaceuticals, APIs, botanicals, forensics, foods, specialty chemicals, etc. for establishing purity, impurities, fingerprint and reverse engineering. They illuminated the application of HPTLC for screening of bioautographic assays such as antibacterial, antioxidant, antifungal and enzyme inhibition. They also introduced the world's first, new generation "HPTLC- PRO" installed in their lab in 2019. Anchrom speakers welcomed all participants in the audience for any technical help and suggested books to the students and others interested in HPTLC applications.

There were about 290 participants majorly comprising of students from various institutions. Following the presentation, a question and answer session was also managed successfully. Our panelists, speakers along with **Dr. KshipraMisra, President, STE** answered all the questions which were critical, logical and mostly technical. The questions put up by the audience clearly displayed their enthusiasm and keen interest in the applicability of the HPTLC technique for their research work which belonged to different fields of pharmacology, natural product chemistry, forensic science and environmental sciences.



The Anchrom Enterprises (I) Pvt. Ltd. team

The concluding of the webinar was marked by a Vote of Thanks delivered by **Dr. Anuja Bhardwaj**, organizing member, STE. The entire STE fraternity is grateful to our Honorable' panelists Dr. AnubhutiPasrija and Dr. Sayeed Ahmad for gracing the event with their kind presence. We are also appreciative of **Mr. AkshayCharegonakar**, Director, Anchrom Enterprises (I) Pvt. Ltd. and his entire team for co-organizing the webinar. Our NGO, is also thankful to **Ms. Vaishnavi Gokhle**, Anchrom for her affable coordination with team STE.

The Save the Environment team



At webinar on “HPTLC: Principles and Applications in Pharmacology, Phytochemistry and Environmental Sciences”.

The Save the Environment (STE) organizing members: Dr. KshipraMisra (in the middle), Ms. Jigni Mishra (Left) and Dr. Anuja Bhardwaj (Right).

It was an immense pleasure for STE to co-organize a webinar with Anchrom as a platform to provide knowledge of the basic principles and applications of HPTLC technique to the students from various institutions and research centers under the presence and guidance of learned panelists and the speakers in the concerned theme of the webinar. Our organization, STE believes that everyone among the audience were benefited and able to extract the knowledge and clear their doubts during the webinar. In future also, it is STE's priority to continue organization and accomplish such interactive sessions in the interest of our future generations.