

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

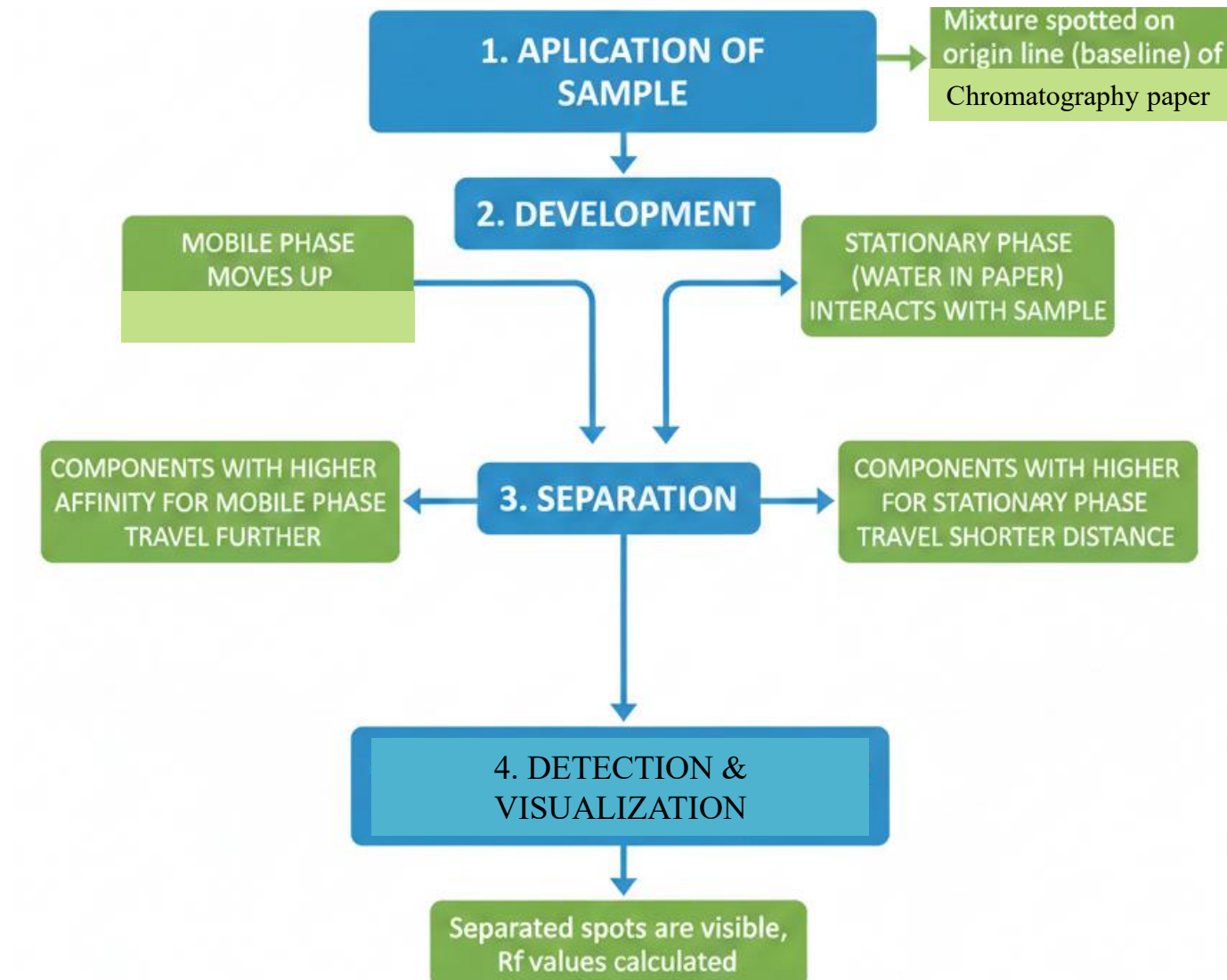
Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai
Approved by Pharmacy Council of India, New Delhi.
Coimbatore -641035

COURSE NAME: INSTRUMENTAL METHODS OF ANALYSIS (BP 701 T)

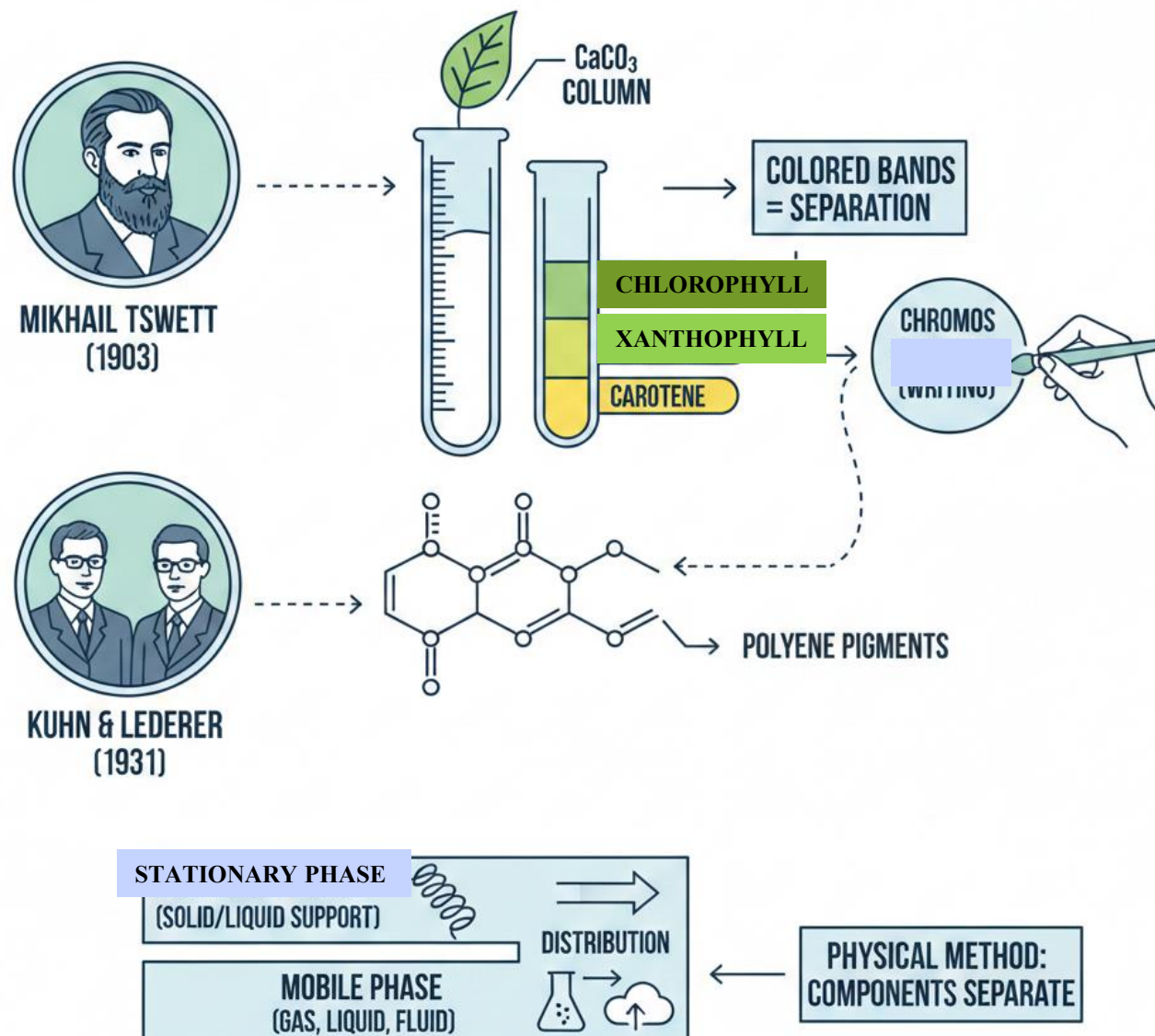
VII SEM/ IV YEAR

TOPIC 25: PAPER CHROMATOGRAPHY

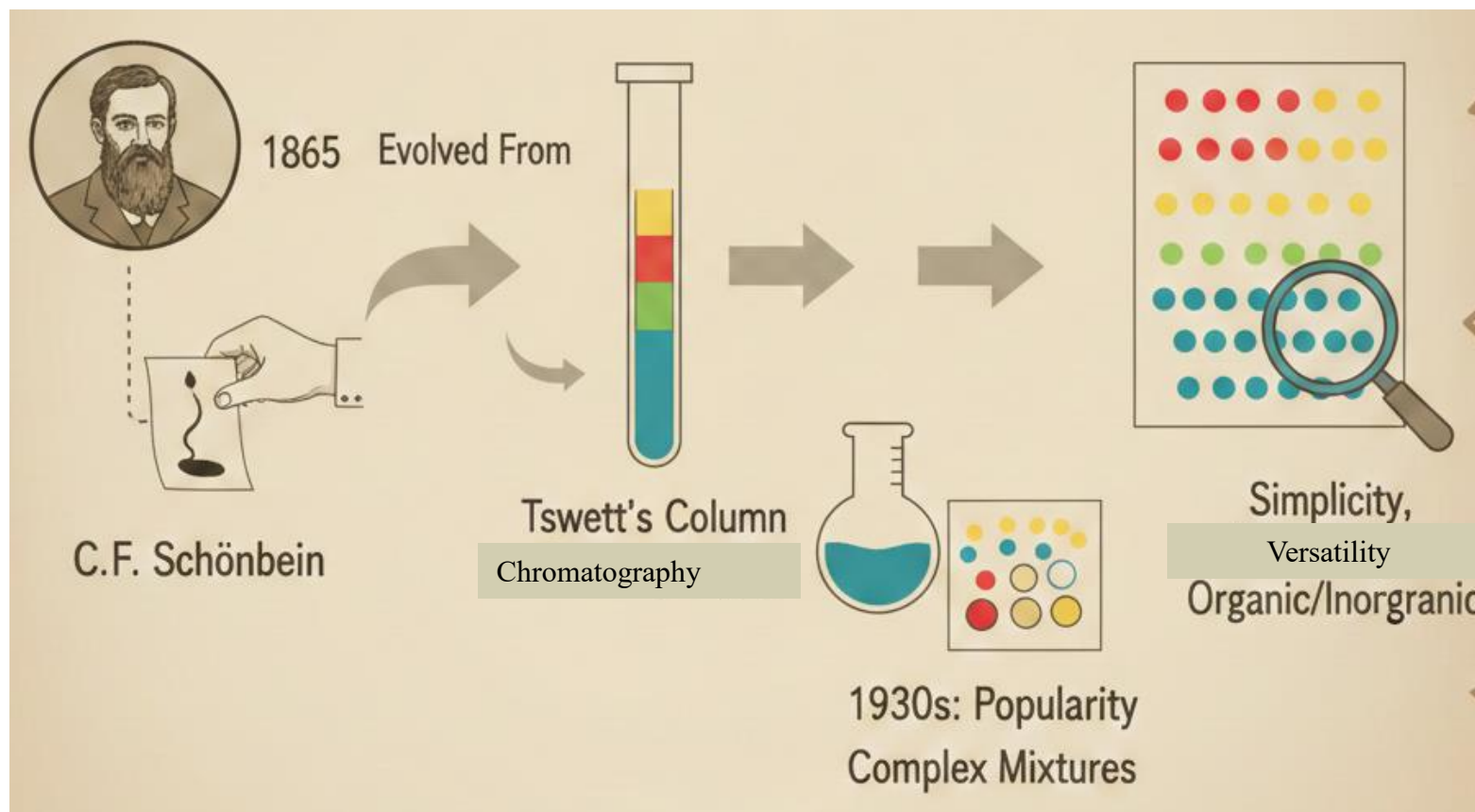
MINDMAP:



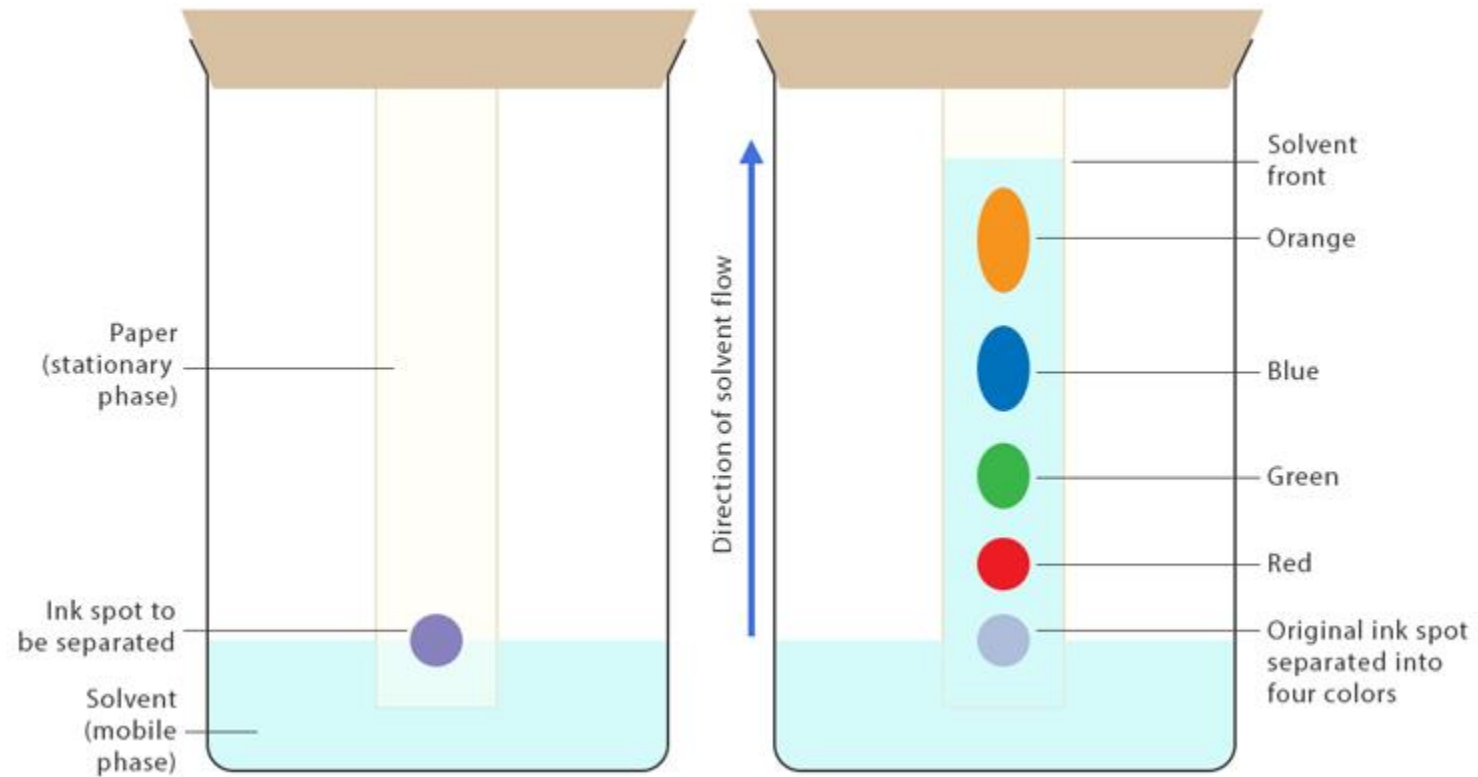
Introduction to Chromatography



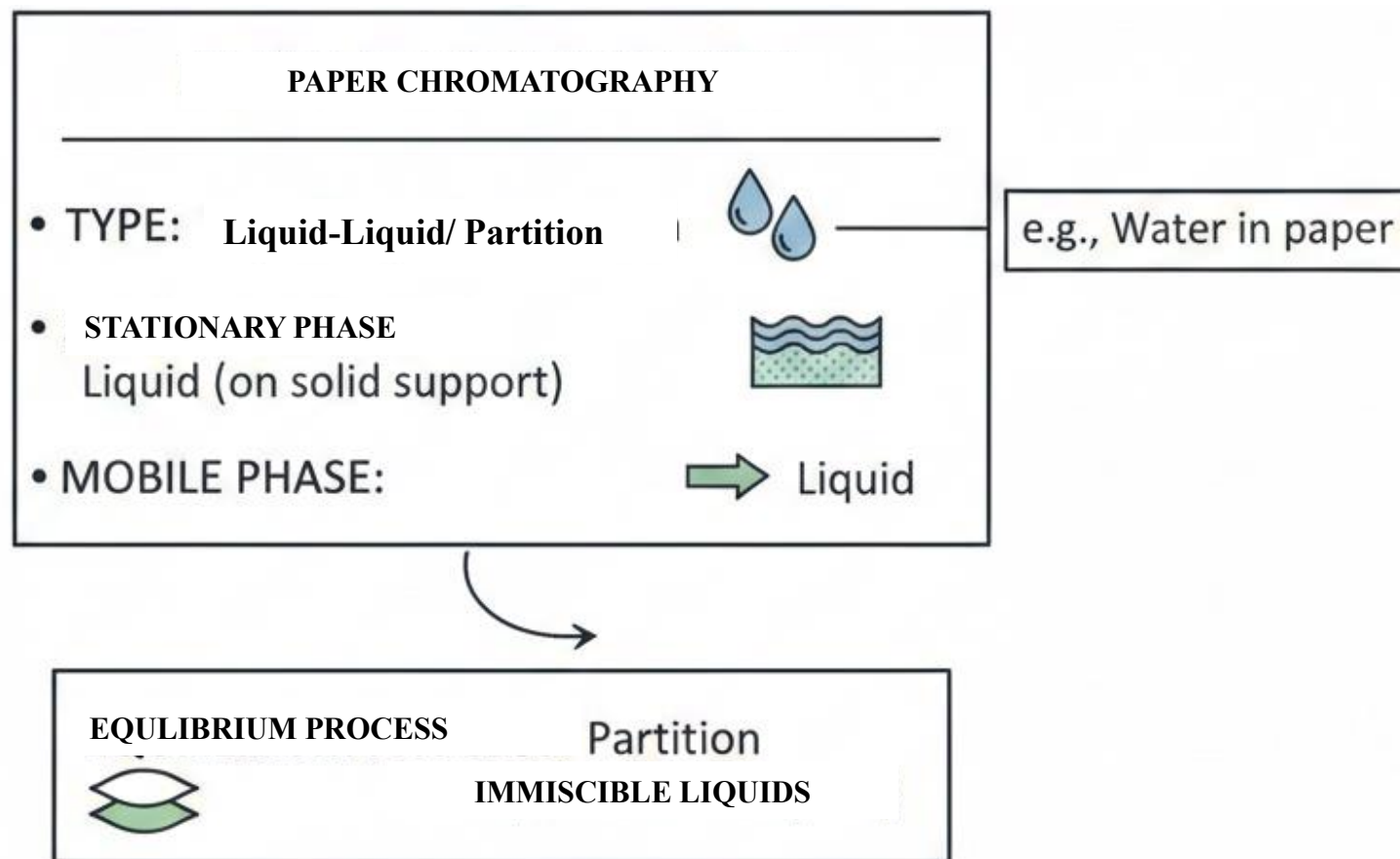
History of PC



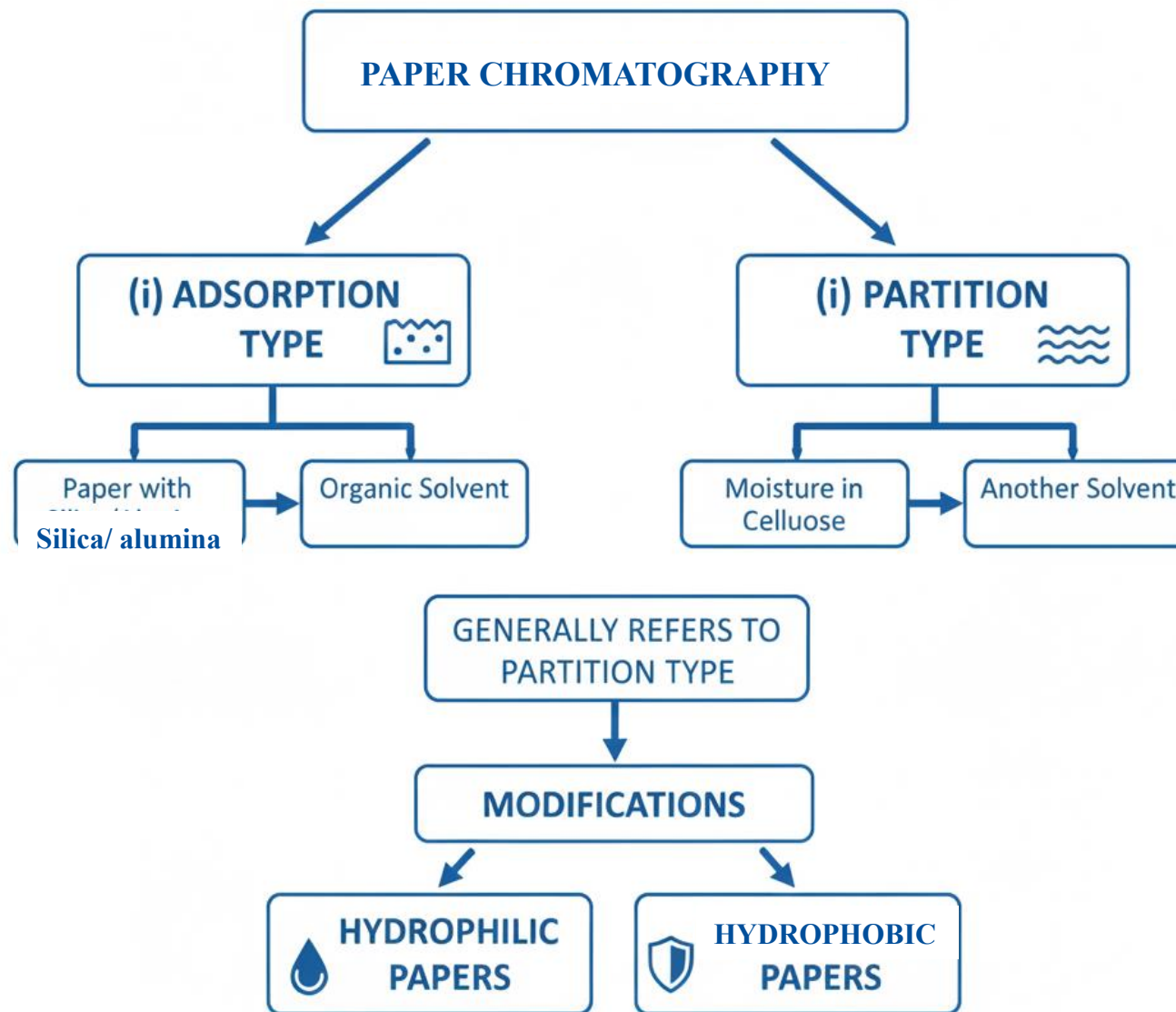
Paper Chromatography



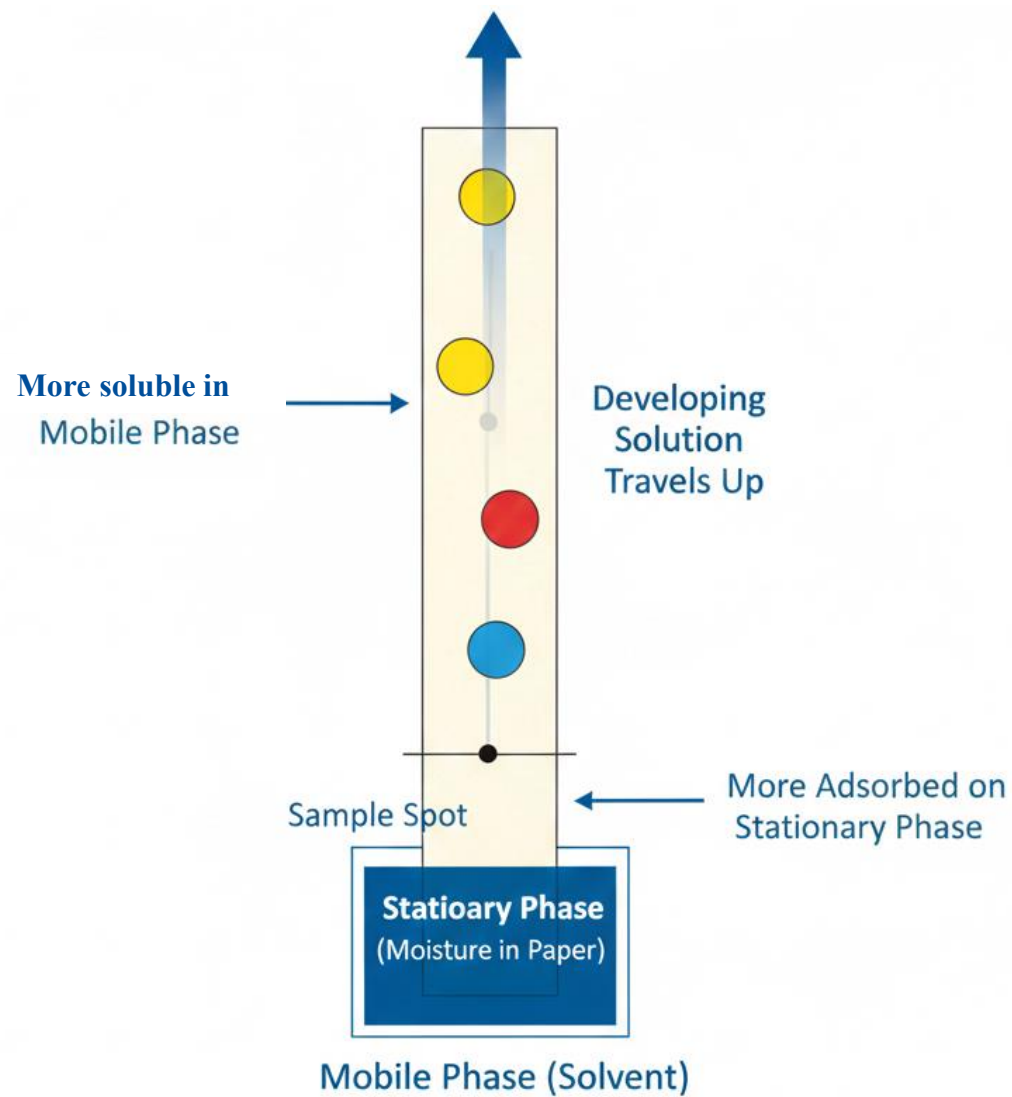
Phases of paper chromatography



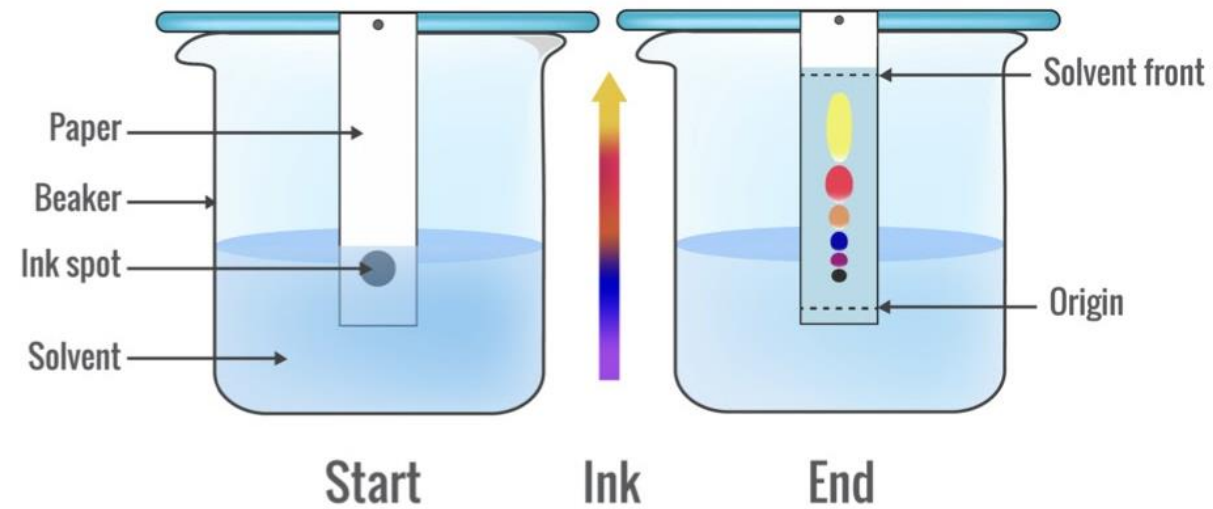
Types of Paper Chromatography



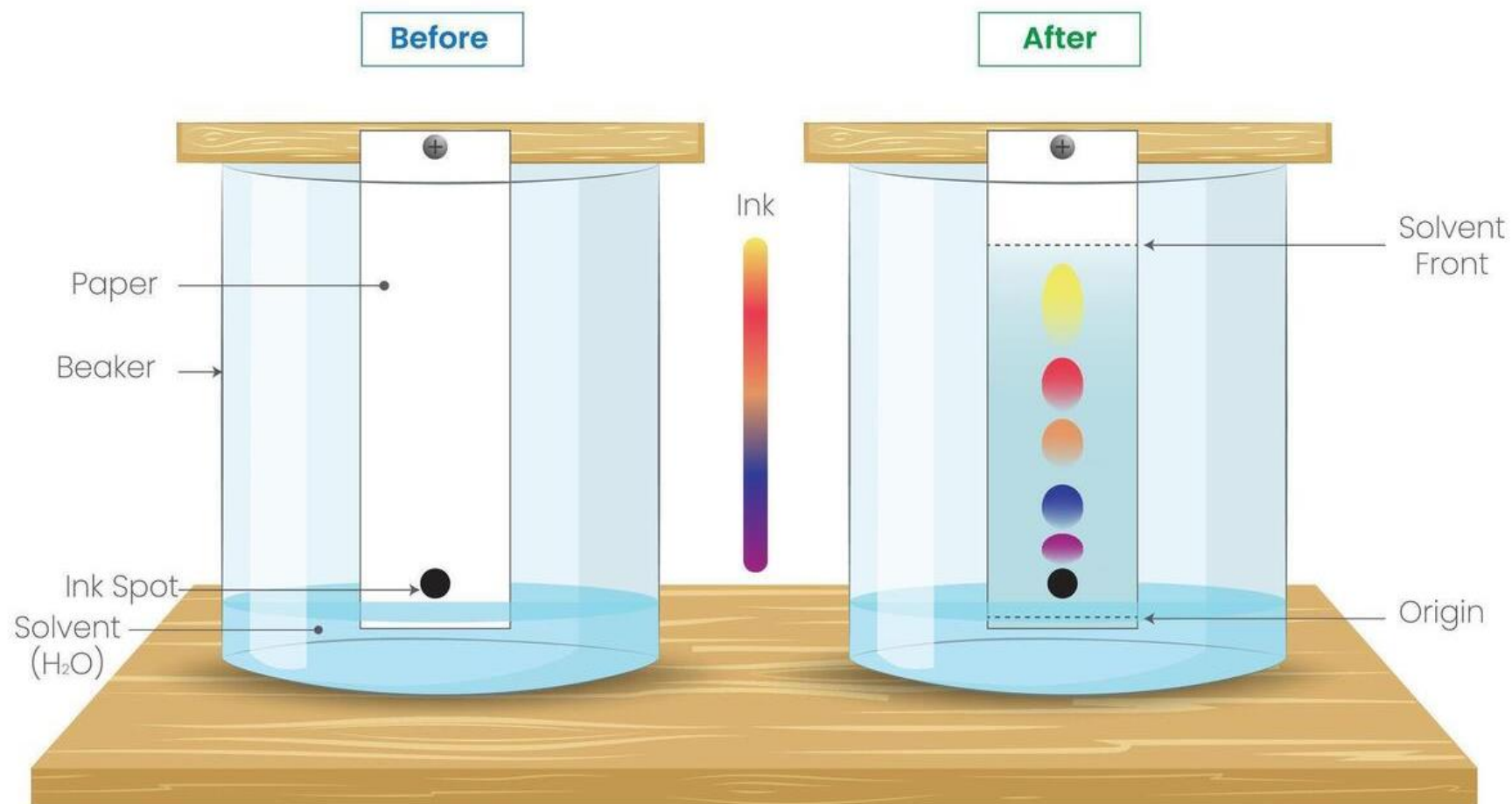
Principle of Separation



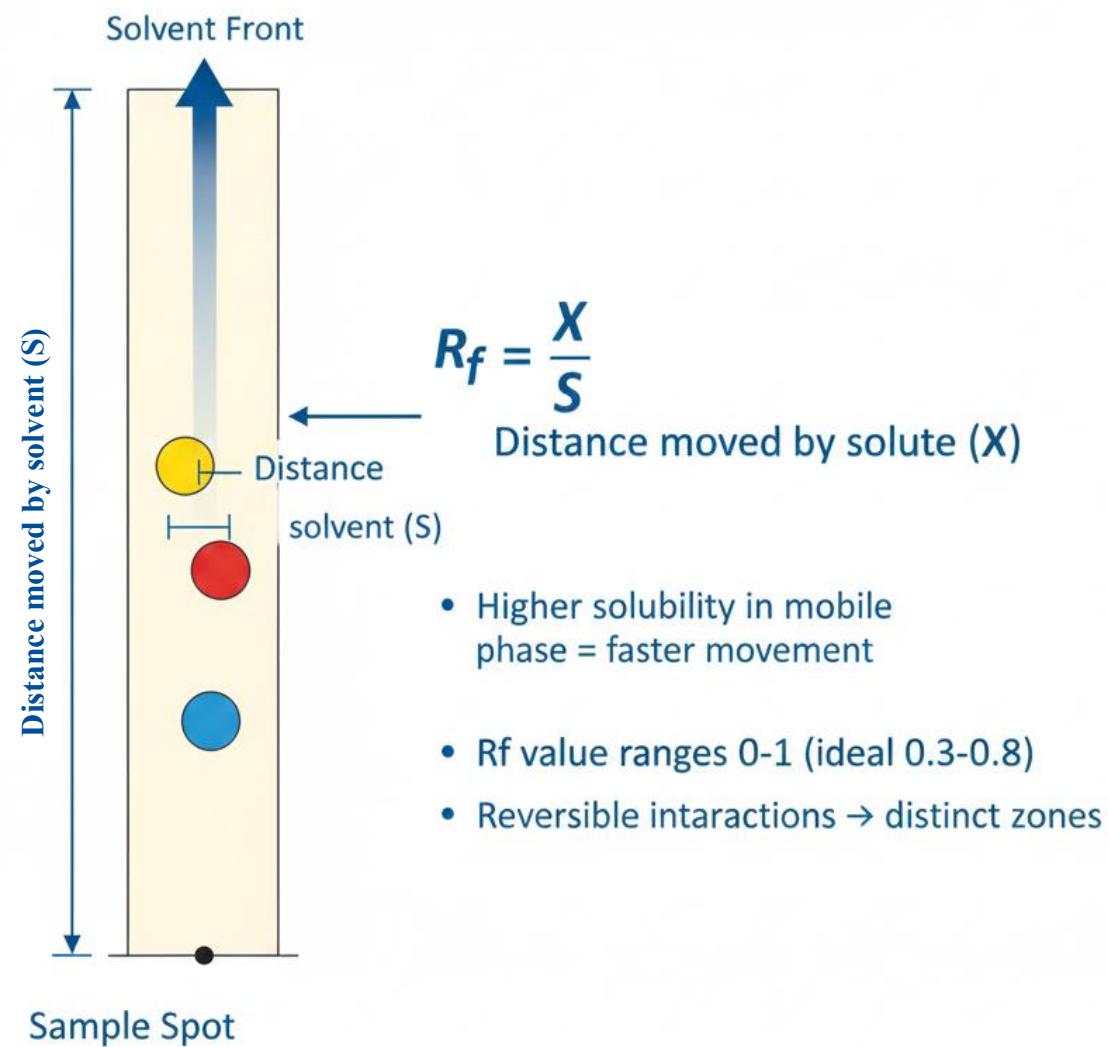
Separation process



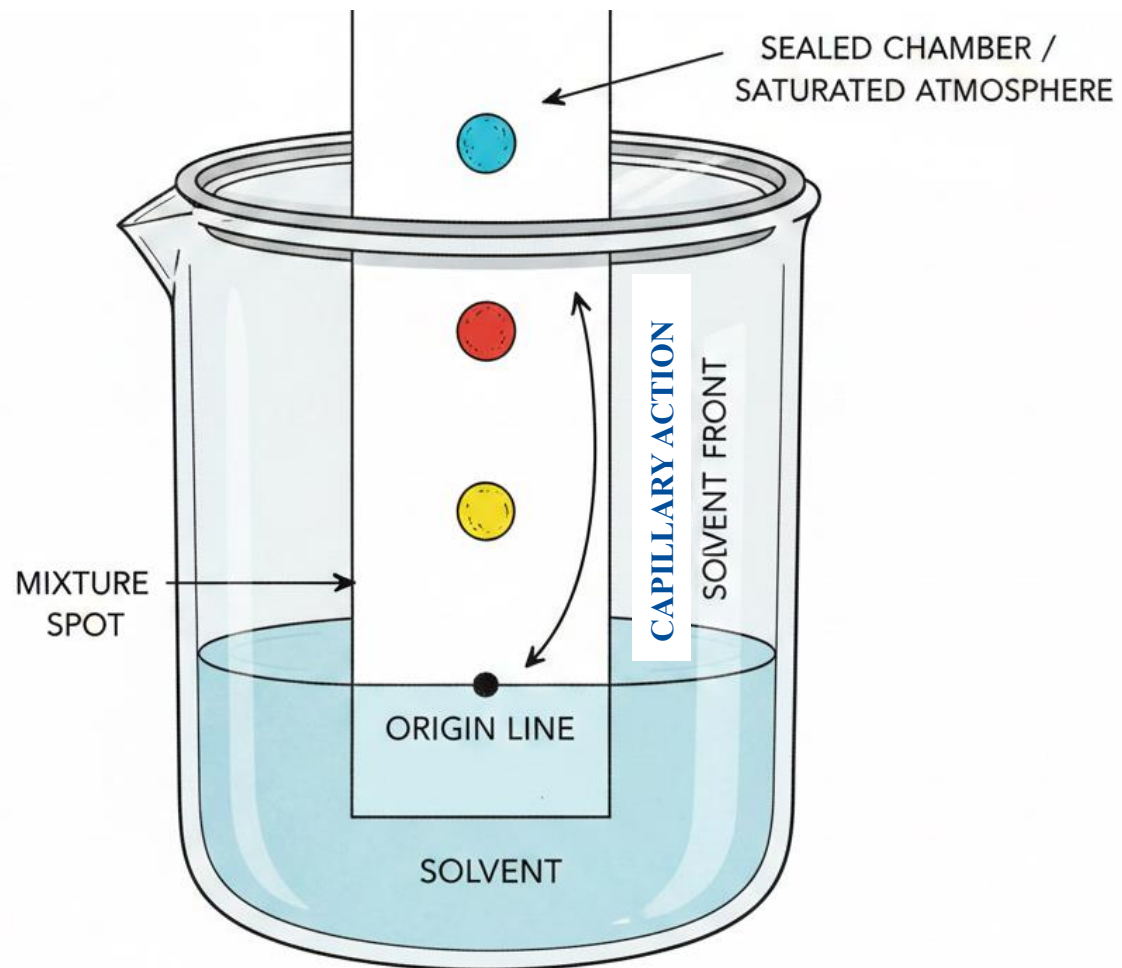
Development



Rf value



Summary



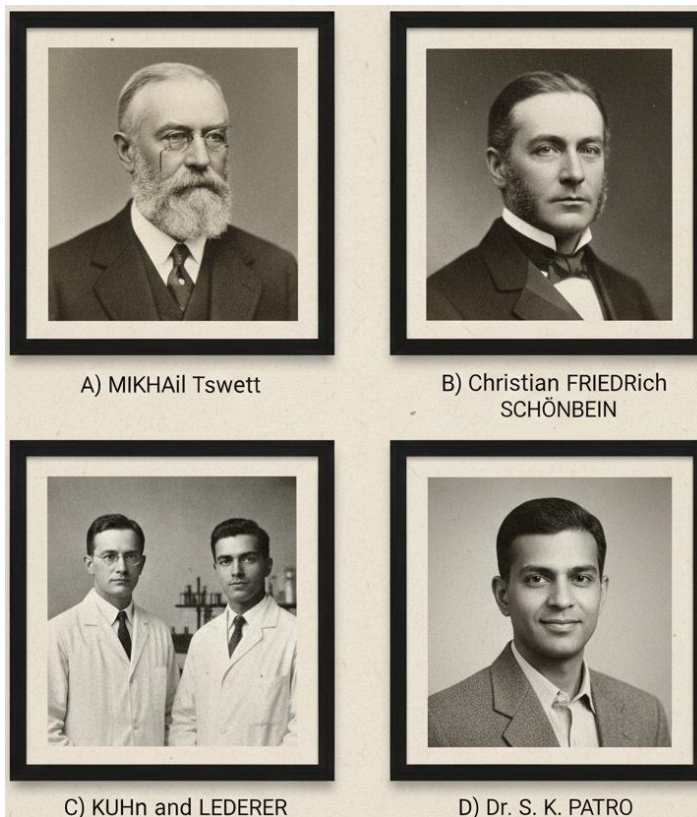
Assessment

1. Who first introduced paper chromatography?



Assessment

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Assessment

2. In paper partition chromatography, the stationary phase is primarily



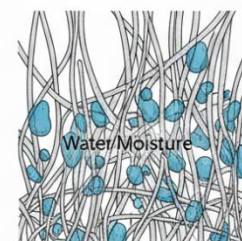
Assessment

2. In paper partition chromatography, the stationary phase is primarily

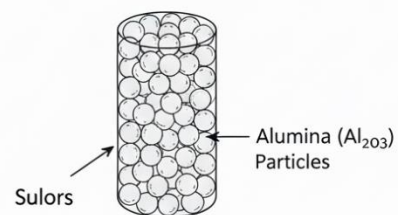
A) SILICA GEL IMPREGNATED ON PAPER



B) WATER/MOISTURE IN CELLULOSE FIBERS



C) ALUMINA



D) ORGANIC SOLVENTS (e.g., PETROLEUM ETHER)



Assessment

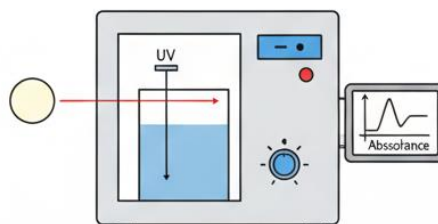
3. Colored spots in paper chromatography (e.g., plant pigments) can be detected by:



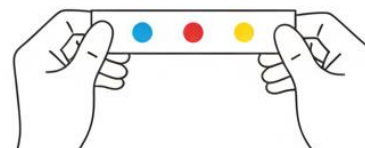
Assessment

3. Colored spots in paper chromatography (e.g., plant pigments) can be detected by:

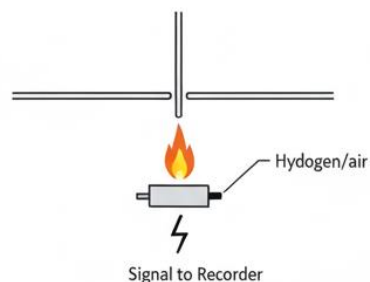
A) UV SPECTROPHOTOMETER



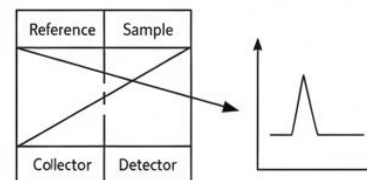
B) DIRECT VISUAL OBSERVATION



C) FLAME IONIZATION DETECTOR (FID)



D) REFRACTIVE INDEX DETECTOR (RID)



References

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2. Skoog DA, Holler FJ, Crouch SR. Principles of instrumental analysis. 7th ed. Boston: Cengage Learning; 2018.
3. Watson DG. Pharmaceutical analysis: a textbook for pharmacy students and pharmaceutical chemists. 5th ed. Edinburgh: Elsevier; 2021.
4. Beckett AH, Stenlake JB. Practical pharmaceutical chemistry. 4th ed. London: Athlone Press; 1988.
5. Chatwal GR, Anand SK. Instrumental methods of chemical analysis. Mumbai: Himalaya Publishing House; latest edition.
6. Willard HH, Merritt LL, Dean JA, Settle FA. Instrumental methods of analysis. 7th ed. New Delhi: CBS Publishers; 1988.
7. Miller JM. Chromatography: concepts and contrasts. 2nd ed. Hoboken: John Wiley & Sons; 2009.
8. Connors KA. A textbook of pharmaceutical analysis. 3rd ed. New York: John Wiley & Sons; 1982.
9. Braithwaite A, Smith FJ. Chromatographic methods. 5th ed. Dordrecht: Springer; 1999.

Thank
you!