



Editorial

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Dear Colleagues,

The present issue of the *Journal of Planar Chromatography—Modern TLC* (JPC) is the fifth one in 2020 and contains a review on vitamins and 10 original research papers written by leading scientists in the field of high-performance thin-layer chromatography (HPTLC) and thin-layer chromatography (TLC).

The first paper in this issue is a mini-review by *Qasim Ullah* and *Ali Mohammad*, entitled “**Vitamins determination by TLC/HPTLC**”. This overview describes the application of TLC in the separation and identification of vitamins for the period 2011–2019.

The first original research paper of this issue is the work of *Thi Kieu Tiên Do*, *Kevin Clark*, *Philippe Christen*, and *Eike Reich* with the title “**Quality assessment of *Sclerocarya birrea* leaves and leaves products from Burkina Faso based on fingerprinting using HPTLC**”. HPTLC fingerprinting is a complex and difficult task to ensure the quality of herbal drugs. The aim is to identify a herbal drug and to detect drug adulteration. This paper describes exemplarily how this can be done by HPTLC and will serve as a future standard for the HPTLC fingerprinting method.

The following paper also deals with the subject of fingerprinting of herbal drugs. This paper with the title “**Simultaneous qualitative characterization of four herbs in Weikangling capsules by a validated high-performance thin-layer chromatography method**” is from *Feng Liu*, *Mengyue Wang* and *Xiaobo Li*. They finally realized the simultaneous identification of *Paeoniae Radix Alba*, *Glycyrrhizae Radix et Rhizoma*, *Bletillae Rhizoma*, and *Notoginseng Radix et Rhizoma*. The characteristic components of each crude drug are identified by comparing simultaneously with the reference standards, the standard herbs, and the negative control samples.

The next four papers also deal with plant drug analysis, but use the quantification of a biomarker that is typical for the plant extract under investigation. Responsible for the work with the title “**Validated simultaneous HPTLC analysis of scopoletin and gallic acid in the methanolic fraction of *Jatropha glandulifera***” is the group of *A. K. S. Rawat et al.* The paper “**Standardization of some plants of the Cucurbitaceae family by a validated high-performance thin-layer chromatography method**” is from *Pulok K. Mukherjee et al.*, the paper “**Comparative quantitative phytochemical and HPTLC analysis of two Euphorbiaceae family plants under the name Dugdhika**” is from the group *Jigna Vadalía et al.* and the publication “**Quantification of the bioactive marker resveratrol in *Morus alba* Linn. fruits by high-performance thin-layer chromatography**” is from the group *Anshul Shakya et al.*

As next publication, *Cornelia Locher et al.* present “**A validated method for the quantitative determination of sugars using high-performance thin-layer chromatography**”. Here, an HPTLC method for the identification and quantification of common sugars (glucose, fructose and sucrose) in honey was developed and fully validated according to ICH guidelines. The method allows the determination of fructose–glucose ratio of a honey, which is not only an important authentication and quality control parameter, but also an indication of its tendency to crystallize.

The last three publications in this issue deal with the quantitative analysis of synthetic drugs. Responsible for the paper “**Smart TLC–densitometric methods for determination of ophthalmic ternary mixture containing chloramphenicol in the presence of its synthetic precursor: Comparative eco-scaling for greenness assessment**” is the group of *Maya S. Eissa*. Here, a TLC method was developed for the determination of an ophthalmic ternary mixture (containing chloramphenicol, dexamethasone sodium phosphate, and tetrahydrozoline hydrochloride) with and without the presence of p-nitroacetophenone, the synthetic precursor of chloramphenicol.

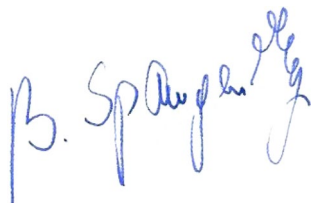
The paper with the title “**A rapid and reliable thin-layer chromatographic method for the**

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simultaneous estimation of celecoxib and diacerein in their binary mixture using nanosilica gel plate” is from *Marwa I. M. H. Soliman et al.* The last paper of this issue describes an „**HPTLC–MS method for the determination of benzodiazepines in urine samples**”. Responsible for this work is the group of *Pallavi Choudhary*.

Thus, this JPC issue gives a typical overview of current HPTLC research.



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