

Commentary by the Winner of the 12th Journal of Oleo Science Best Author Award

Kashif Ghafoor

Department of Food Science and Nutrition, King Saud University, Riyadh, Saudi Arabia



It is a great pleasure to learn that the Journal of Oleo Science has offered me the Best Author's Award for the year 2020. The award was based on three of our articles published in the journal during the year 2020 (*J. Oleo Sci.* **69** (4) 307-315 (2020); *J. Oleo Sci.* **69** (5) 423-428 (2020); *J. Oleo Sci.* **69** (10) 1219-1230 (2020)). I am thankful to the journal team and leadership to recognize our contributions and research works and bestow this honor.

Plant materials are diverse, and their use in different food products requires applying specific processing procedures. Each type of plant matrix responds differently to these processing procedures, depending on the type of plant material, variety, harvest season, and the processing methods used in their preparation. Extracts obtained from plants are rich in certain phytochemicals that carry critical functional properties. These properties can be utilized to improve the quality and health benefits of other foods. Since processing methods such as frying, roasting, storage are often applied, it is highly beneficial to analyze these effects. Hence, our research works focus on exploring the impact of various independent variables on the physicochemical and nutritional characteristics of processed food products. These studies help understand possible health benefits on intended functional foods and optimize different types of processing methods.

The above manuscripts aimed to evaluate the effects

of adding sumac extracts at varying concentrations on physicochemical properties and oxidative stability of cold-pressed orange, lemon, and mandarin seed oils. It was observed that it was 0.5% extract addition showed improved quality characteristics in oils mentioned above. Another study included the roasting of walnut kernels, and the yield, tocopherol contents, and fatty acid profile of resultant oil were evaluated, which showed an increment in oil yield. But heat-sensitive components encountered a decrease in their contents, possibly due to thermal degradation. In another study, palm oil was enriched with natural (thyme and rosemary) extracts and synthetic antioxidants used in the frying of differently cut potato chips. The study also demonstrates a detailed characterization for moisture, oil uptake, fatty acid composition, trans-fat contents, acrylamide, peroxide values, and fried potato chips' sensory quality. We anticipate these studies quite useful for journal readership interested in processing and researching, and developing similar food products.

As I express my gratitude to the journal team for honoring me with this award, it would be a great pleasure for me to mention the collaboration with Professor Mehmet Musa Ozcan and Professor Fahad AL-Juhaimi. Their support and contributions proved imperative in the completion of these studies and were published in the journal. It would also be essential to mention other co-authors' support and assistance because good collaborative teamwork enabled me to achieve this honor.