## ABOUT THE BOOK



#### The story behind the book

The original idea for the book came about in 2013, on an evening walk along the Slovenian coastline, at the end of a long scientific day full of lectures during a pharmaceutical congress on medicinal plants and modern phytotherapy. Shortly thereafter, days and months of intense writing and editing of the first chapters began. However, the exact content and scope of the book continued to evolve in the minds of the editors for some time.

The Slovenian version of the book, entitled Sodobna kozmetika, was published in 2015. It enjoyed immediate and exceptional success in the field of Slovenian cosmetics and with the general public, and earned the "Prometheus of Science for Excellence in Communication" award, the highest Slovenian award for best practices in communicating science to the public at various levels, particularly the general public.

Due to the exceptional success that the book achieved within the Slovenian cosmetic, pharmaceutical and medical profession, and with the general public in particular, we decided to translate it into English.

It should be mentioned that the development of the book was driven by another important principle: a deeper understanding of modern society in which a back-to-nature trend is increasingly present. Modern Cosmetics aims to make a logical contribution to this emerging trend, and to establish a concept of rational cosmetics that takes into account the natural needs of the skin, uses skin-friendly cosmetic ingredients and recognises approaches of modern cosmetology, all while respecting ecological values.



It is our deep and sincere wish that the book will have a wide circle of readers, as only knowledge can contribute to awareness about the use of healthy and eco-friendly products.

# Modern Cosmetics, Ingredients of Natural Origin, A Scientific View, Volume 1

The main objective of the book was to collect high-quality information regarding natural cosmetic ingredients and raise awareness about natural cosmetics to a higher level. We believe that Modern Cosmetics successfully achieves the objective to build a clear, comprehensive and critical overview of the area of natural cosmetic ingredients.

Modern Cosmetics, Ingredients of Natural Origin, A Scientific View, Volume 1 is a comprehensive publication that describes in detail 290 cosmetic ingredients of natural origin and presents more than 500 cosmetic ingredients. It is the world's most comprehensive book on cosmetic ingredients of natural origin, and something entirely new in the field of scientific and popular literature. There is currently no such comprehensive description of natural cosmetic ingredients anywhere in the world.

Modern Cosmetics is based on a comprehensive review of scientific data from extensive life science databases, and is written with an objective and critical eye. However, the language used to present this wealth of information is intentionally understandable to the general public and not strictly scientific, and reflects the book's broader objective to share scientifically



proven, reliable and non-populist information with a general audience.

A total of 480 pages, 24 chapters, 290 detailed monographs of natural cosmetic ingredients, and more than 500 presented ingredients: these are the extensive statistics of Modern Cosmetics, Volume 1.

It was written by independent professionals: 11 scientists professionally active in the fields of pharmacognosy and cosmetology, including ten persons holding the highest scientific title of doctorate and six persons working as professors or assistant professors at the Faculty of Pharmacy of the University of Ljubljana, Slovenia. The University of Ljubljana is listed amongst the top 500 universities in the world according to the Shanghai Academic Ranking of World Universities (ARWU), the Times Higher Education-QS World University Ranking and the Webometrics Ranking of World Universities.

#### **Brief description of content**

Modern Cosmetics, Volume 1 provides the most recent literary review, assembled from extensive life science databases. Last but not least, readers will be fascinated not only by the book's useful information, but also by the very rich graphic material and the numerous interesting facts inserted throughout the book's chapters.

More than 500 ingredients are covered in more than 20 chapters: Vegetable butters and oils; Emollients and occlusives; Emulsifiers and surfactants for skin and hair cleansing; Thickeners; Moisturisers and humectants; Acids for pH adjustment; Antioxidants; Vitamins; Cosmetically active ingredients with tonic activity; Cosmetically active ingredients with antimicrobial



activity; Cosmetically active ingredients with anti-inflammatory activity; Cosmetically active ingredients for improving skin circulation; Cosmetically active ingredients for skin lightening; Cosmetically active ingredients for self-tanning; Cosmetically active ingredients with hormonal activity; Sunscreens; Exfoliants, etc.

In addition, the first three introductory chapters of the book provide information regarding 1) natural cosmetics in general, including definitions and regulations, 2) the skin and 3) the technological aspect. These chapters are an essential part of the book and are aimed at introducing the reader to the field of cosmetics.

Individual cosmetic ingredients are presented in the form of monographs, using a uniform and clear structure. The key parts of these monographs are:

- 1) The INCI names of individual ingredients, which enables us to search for suitable cosmetic ingredients to be used in the cosmetics we are developing, or to directly study the cosmetic products that we use or that interest us;
- 2) Botanical descriptions of plant sources;
- 3) Characteristics explained in simple chemistry terms, such as chemical composition, solubility, stability and physiological function; and
- 4) The mechanism of action and use, where data is presented on traditional and contemporary use and scientific research (e.g. in vitro, in vivo and clinical), as well as warnings and risks associated with use, as required.



#### For whom is Modern Cosmetics intended?

Modern Cosmetics is an important source of information for both the field of science and the general public. Due to its scientific and practical value, it is intended for medical professionals, such as pharmacists, doctors, cosmetologists, as well as students of natural sciences. It is an exceptional overview and inspiration for the cosmetic industry. However, a very important target public, in urgent need of a reliable source of information regarding cosmetics, is the large number of cosmetic users, particularly the users of natural cosmetics.

The book is an appropriate source of literature for those who are just getting acquainted with natural cosmetic ingredients, and for those who wish to deepen their knowledge about natural cosmetics.

Last but not least, readers will be fascinated not only by the book's useful information, but also by very rich graphic material, which makes the book an encyclopaedia of the plant world, and the numerous interesting facts inserted throughout its chapters.

#### A word from the editors

A natural way of life is one of the ideals of modern society, and cosmetics are only one of the areas where this tendency is strongly present. However, it expresses itself not only as a sharp increase in the use of natural cosmetics but also as an ever growing awareness of our relation to nature, which can be seen at the individual and social level.



It is important to emphasise that our vision of (natural) cosmetics has a broader context: the book was thoroughly and carefully planned to present a concept of cosmetics that is based on the skin's physiological needs, ecologically and physiologically acceptable cosmetic ingredients, and modern approaches of cosmetology. Our goal is thus to spread this knowledge and these values, not only to the scientific public, but also to the general public. This book aims to build and establish a concept of modern cosmetics that derives from these values. The foundations of our concept are grounded in the meshing of the physiological and natural needs of the skin, ecologically and physiologically acceptable cosmetic ingredients, and modern approaches of cosmetology.

### MODERN COSMETHICS