

“Opuntia: Bioactivity, Chemistry and Industrial Applications”

A Digital Public Lecture in the framework of COSIMENA



Realization	Digital Format
Date	Wednesday, August 17 th , 2022 from 5.00 p.m. till 6.30 p.m. (Cairo Local Time)
Guests	Researchers and Scientists working in the field of agriculture, food science, nutrition and biochemistry from Germany, Egypt, the MENA region and Sudan
Duration	1,5 h
General Moderation and Contact Person	Nermine Abdelaty
Organizer	DAAD Regional Office Cairo German Academic Exchange Service 11 El Saleh Ayoub St. Zamalek, Cairo, Egypt URL: www.daad.eg

Concept Note

Opuntia fruits, commonly known as cactus pears or prickly pears, have been suggested by the Food and Agriculture Organization to be a promising and strategic crop in regions suffering from lack of water. In Mexico, India, South Africa, and the Mediterranean, *Opuntia* fruits have become popular due to their nutritive value and health-promoting benefits, including antioxidant, antiulcerogenic and antiatherogenic traits and protective effects against LDL oxidation. Additionally, readily absorbable sugars, high vitamin C and mineral content, and a pleasant flavour make *Opuntia* tailor-made for novel food.

Due to their ecological advantages, high functional value, and health-related traits, *Opuntia* fruits can be highly exploited in different food processing applications. For instance, *Opuntia* cactus fruits are used for the preparation of juices and marmalades; *Opuntia* cactus plants are used to feed animals in African and Latin American countries; Peruvian farmers cultivate *Opuntia* cactus for growing the cochineal (*Dactylopius coccus*) insect and producing the natural dye carmine; and the commercial production of food and non-food products from *Opuntia* has been established in Mexico, USA and several Mediterranean countries.

***Opuntia* spp.: Chemistry, Bioactivity and Industrial Applications** create a multidisciplinary forum of discussion on *Opuntia* cactus with special emphasis on its horticulture, postharvest, marketability, chemistry, functionality, health-promoting properties, technology and processing.

The lecture includes a detailed discussion of the impact of traditional and innovative processing on the recovery of high-added value compounds from *Opuntia* spp. by-products and explores the potential applications of *Opuntia* spp. in food, cosmetics and pharmaceutical products.

The event is organized within the framework of the DAAD Regional Office Cairo project “Clusters of Scientific Innovation in the Middle East and North Africa” (COSIMENA), which aims to strengthen and initiate scientific cooperation and to make networks of researchers and universities between Germany and the MENA region visible. As a result, existing cooperation is made visible and potential synergies are initiated.

Programme

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[Link: Click here](#)

5.00 p.m.- 5.10 p.m.	<p>Welcoming Words Isabell Mering Director of the DAAD Regional Office Cairo</p>
5.10 p.m. – 5.55 p.m.	<p>Lorena Mohr Head of Science and Protocol at the German Embassy in Cairo Presentation: “Opuntia: Bioactivity, Chemistry and Industrial Applications” Prof. Dr Mohamed Fawzy Ramadan Zagazig University</p>
5.55 p.m. – 6.25 p.m.	Q & A session
6.25 p.m.- 6.30 p.m.	<p>End of the event Nermine Abdelaty DAAD Regional Office Cairo</p>

Bio of the Speaker



Prof. Dr Mohamed Fawzy Ramadan is a Professor of Biochemistry and Food Chemistry at Zagazig University (Egypt). Prof. Ramadan obtained his Ph.D. (*Dr.rer.nat.*) in Food Chemistry from the Berlin University of Technology (Germany, 2004). As a post-doctoral researcher, Prof. Ramadan continued his research at ranked universities in different countries such University of Helsinki (Finland), Max-Rubner Institute (Germany), Berlin University of Technology (Germany), and the University of Maryland (USA). In 2010, he was invited to be Visiting Professor (100% research) at King Saud University in Saudi Arabia. In 2012, he was invited to be a visiting Professor (100% teaching) in the School of Biomedicine, Far Eastern Federal University in Vladivostok, Russian Federation.

Prof. Ramadan published more than 300 peer-reviewed papers and reviews in internationally recognized journals. He edited several books and reference work (the recent h-index is 43). He is an active member of several academic bodies and associations. He also received Abdul Hamid Shoman Prize for Young Arab Researcher in Agricultural Sciences (2006), Egyptian State Prize for Encouragement in Agricultural Sciences (2009), European Young Lipid Scientist Award (2009), AU-TWAS Young Scientist National Awards (Egypt) in Basic Sciences, Technology and Innovation (2012), TWAS-ARO Young Arab Scientist (YAS) Prize in Scientific and Technological Achievement (2013), and Atta-ur-Rahman Prize in Chemistry (2014).