



2021

2nd World Conference
on Byproducts of Palms

Rediscovering Palm Byproducts

28 - 30 September 2021 | Online, Kuala Lumpur

Post Event Report

EVENT SUMMARY

CONFERENCE ORAGNIZERS

The main organizing institutions are the international Association for Palm Byproducts (ByPalma Assoc), and Universiti Putra Malaysia (UPM).



CONFERENCE CHAIRS

Mohammad Jawaid, Universiti Putra Malaysia, Malaysia (Chairman)

Hamed El-Mously, International Association for Palm Byproducts, Egypt (Co-chair)

Mohamad Midani, German University in Cairo, Egypt (Co-chair)

Aidah Jumahat, Universiti Teknologi MARA, Malaysia (Co-chair)

ORGANIZING COMMITTEE

Arno Fruehwald, University of Hamburg, Germany

Ramzi Khiari, Institut Supérieur des études Technologiques de Ksar-Hellal, Tunisia

Othman Alothman, King Saud University, Saudi Arabia

Navin K. Rastogi, Central Food Technological Research Institute, India

Sherif El-Sharabasy, Central Laboratory for Date Palm Research and Development, Egypt

Mahmoud Zakaria, Ain Shams University, Egypt

SPONSORS AND PARTNERS

- Springer Nature, Publishing Sponsor
- PalmwoodNet, Industry Partner
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- Clusters of Scientific Innovation in the Middle East and North Africa (COSIMENA), Academic Sponsor
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- Ain-Shams University, Faculty of Engineering, Cairo, Egypt, Academic Sponsor
- University of Technology North Bangkok, Thailand, Academic Sponsor



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VENUE

ByPalma 2021 took place online, directly streaming to computer or mobile. Attendees were able to watch the live talks and visit the poster sessions, ask questions about the research presented, chat with other attendees and follow up directly with the authors.

ByPalma 2021 online platform provided the means to connect with key researchers and even watch sessions on-demand (for those unable to join the live-conference). On-demand access included recordings of talks and access to posters from authors that have agreed for post event distribution.

NUMBER OF ATTENDEES

166+ attendees registered for the conference, from 14 research institutions, 53 universities, 12 companies, and 9 industry associations, representing more than 25 countries.

OVERVIEW

The Palmae family includes a wide variety of species and they are considered the main source of livelihood for significant proportion of the world population.

Unfortunately, their byproducts (secondary products) are often regarded as waste, despite that they represent a sustainable material base for a wide spectrum of industries ranging from compost, wood substitutes, pulp, up to fiber reinforcements for advanced composites.

ByPalma is the only conference solely focusing on the byproducts of palm plantation around the globe and their current and potential applications. This includes all Palmae family, such as Date palms, Coconut palms, Oil palms, Doum palms, sugar palm...etc.

This conference highlighted the great potential of the palm byproducts in the circular bioeconomy of the future!

- Bringing together leading academic scientists, researchers, artisans, entrepreneurs and industry professionals active in the area of palm byproducts R&D, manufacturing, and crafts from all around the globe to exchange recent developments, technologies, innovations, trends, concerns, challenges and opportunities.
- Rediscovering palm byproducts and maximizing their added-value and creating an economical resource that can help in the sustainable development of vast rural areas in different countries in the world.
- Establishing an international network of scientists, artisans, and industry professionals

ByPalma 2021 conference covered a wide range of trends on palm byproducts in wood substitutes, composite reinforcements, biotechnology, fertilizers, food, paper, textiles and bioenergy.

ByPalma 2021 is considered the main gathering for celebrating and rediscovering palm byproducts!

CONFERENCE FORMAT

The three-days conference comprised a welcome note, 17 parallel sessions taking place in 3 parallel rooms, 8 keynote talks, and a poster session. In addition to, 2 special sessions one on German-Malaysian OPT project, and the second on SATREPS-OPT research project.

Including 88 oral presenters, 7 poster presenters, and 8 keynote speakers.

The conference was structured to foster discussion between participants around the core themes of the conference which is "Rediscovering Palm Byproducts". This was achieved by the discussions after each talk. Moreover, 3 WhatsApp groups were created to allow participants to continue their discussions after each session.

OPENING

The opening of the conference started by brief recitation of the holy Quran, followed by a welcome message by the conference chair Prof Dr. Mohammad Jawaid. Afterwards, the chairman invited the conference organizers and partners to give an opening message.

CONFERENCE TOPICS

The 17 parallel sessions were classified based on the different palm species (oil palm, date palm, coconut palm, sugar palm) in different applications of their byproducts as follow.

- Wood Alternatives and Panels
- Bio-Medicine and Bio-Technology
- Bio-Fertilizers
- Bio-Composites
- Fiber, Paper and Textiles
- Food Applications
- Design and Architecture
- Sustainable Energy

REGISTRATION

Registration for the conference was open to academics, researchers, students, industry professionals, artisans, designers, government officials, and palm growers from around the world. Registration was opened online on bypalma.com through bank transfer, and online payment.

A number of complimentary free registrations were offered to the organizing committee members, scientific committee members, sponsors, keynote speakers and VIP guests. Discounted special registration rates were offered to participants from Malaysia as well as participating students.

German Academic Exchange Service (DAAD) and its lighthouse project COSIMENA were supporting ByPalma conference as academic partners and covered the participation fees of 6 expert speakers from the MENA region under the framework of the COSIMENA project. The supported presentations are listed below:

1. Utilization of Date (*Phoenix dactylifera* L.) pits as a source of bioactive components – Egypt
2. Potential of date palm frond waste for particleboard industry – Iran
3. Innovative modern furniture inspired by Egyptian identity made from palm fronds and digital printing trendy Upholstery designs – Egypt
4. Evaluation of Environmental Impact of Palm-fiber based Geotextile using a Life Cycle Method – Morocco
5. Biorefinery concept of fiber extraction and biogas production using common date cultivar biomass (*Phoenix dactylifera* L.) – Tunisia
6. Activated carbon from date palm rachis for continuous column adsorption of O-Cresol - Tunisia

BEST PRESENTATIONS AND YOUNG SCHOLARS AWARD

Springer Nature Technology and Publishing Solutions Singapore sponsored the best presentations and young scholars award including 13 book prizes.

Best Presentation Awards

Day 1:

- ID 21, Lena Heister, Germany, GLT FROM OIL PALM WOOD – BUILD-UP, PRODUCTION AND ELASTOMECHANICAL PROPERTIES
- ID 87, Basim Abu-Jdayil, United Arab Emirates - DATE PALM SURFACE FIBERS AS A GREEN THERMAL INSULATOR
- ID 39, Nur Amirah Khairina Binti Khairil Anwar, Malaysia - LARGE SCALE BIO-SUCCINIC ACID PRODUCTION FROM INORGANIC SALTS PRETREATED OIL PALM EMPTY FRUIT BUNCH USING ACTINOBACILLUS SUCCINOGENES

Day 2:

- ID 58, Thiruchelvi Pulingam, Malaysia, THE EFFECTS OF OIL PALM TRUNK FIBERS ON PLANT GROWTH AND SOIL MICROBIAL COMMUNITY
- ID 77, U. Johnson Alengaram, Malaysia, IMPACT AND BLAST RESISTANCE BEHAVIOUR OF OIL PALM SHELL CONCRETE AND COMPARISON WITH NORMAL WEIGHT CONCRETE
- ID 03 - Thakshila Dayananda, United States, COCONUT COIR PITH LIGNIN BASED FERTILIZER MATRIX FOR CONTROLLED RELEASE OF UREA

Day 3:

- ID 94, Arno Fruehwald, Germany - COCONUT WOOD: PROPERTIES, PROCESSING AND PRODUCTS
- ID 107, M.Y. Nor Yuziah, Malaysia - PROCESSING AND ALKALI TREATMENT IMPACT TOWARDS OIL PALM FROND FIBERS BULK DENSITY AND WOOD-PLASTIC COMPOSITE PERFORMANCE
- ID 44, Laila Laasri, Morocco - EVALUATION OF ENVIRONMENTAL IMPACT OF PALM-FIBER BASED GEOTEXTILE USING A LIFE CYCLE METHOD

Best Poster Award

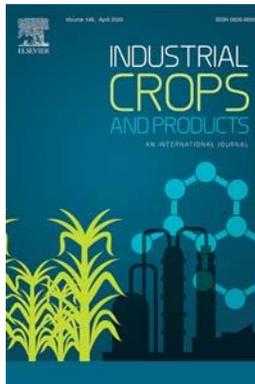
- ID 70, Hanane Chakhtouna, Morocco - BIOCHAR COMPOSITE DERIVED FROM DATE PALM FIBERS FOR POLLUTANTS REMOVAL FROM WASTEWATER

Young Scholars Awards

- ID 29, Chiraz Ben Sassi, Tunisia - DATE PALM PIT POLYPHENOLS LOADED GUM ARABIC MICROPARTICLES: INFLUENCE OF EGG YOLK PROTEINS ON THE PHYSICAL PROPERTIES
- ID 79, Lobna A. Elseify, Egypt - COMPARATIVE STUDY OF DATE PALM MIDRIB AND SPADIX FIBERS WITH OTHER LEAF FIBERS AND THEIR COMPOSITES
- ID 72, Arif Nuryawan, Indonesia - UTILIZATION OF OIL-PALM LEAVES FOR MAKING INNOVATIVE PRODUCTS

PUBLISHED PROCEEDINGS

Abstracts were published online in a book of abstract and distributed among all conference attendees. Moreover, selected full papers will be published in special issues of Industrial Crops and Products Journal (Elsevier, Scopus, IF 4.19), Applied Science and Engineering Progress Journal (Scopus), Moroccan Journal of Chemistry (ISI, Scopus, IF 0.48), and Materials Science Forum (Scopus, Google Scholar, IF 0.55).



Industrial Crops and Products
Journal (Elsevier, Scopus, IF
5.65)



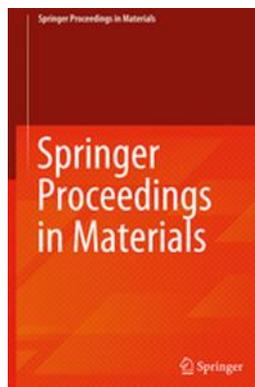
Applied Science and Engineering
Progress Journal (Scopus)



Moroccan Journal of Chemistry
(ISI, Scopus,
IF 0.48)



Materials Science Forum
Journal (Scopus, Google
Scholar, IF 0.55)



Springer Proceedings in
Materials (Springer)



Composites Science and
Technology Book Series
(Springer)

CONFERENCE RECOMMENDATIONS

The major recommendations of the conference are:

- To organize the 3rd round of ByPalma after 2 years in 2023, we have already received expression of interest to host in Saudi Arabia, but we are still evaluating other offers!
- Activate the role of the International Association for Palm Byproducts as a professional society with membership packages for personal, institutional, and industrial membership, with subject groups on wood, composites, textiles, biotechnology and others
- Prepare the membership forms and email to participants of ByPalma 2021 for free membership
- Bring Small and big industries as joint partners to do product development from palm byproducts
- Organize group meetings and workshops for specific subjects related to palm byproducts
- Initiate a scientific journal with a proposed titled "Palm Byproducts Valorization"