

Second Central Asian DUst Conference (CADUC-2) in Nukus (South of Aral Sea; Uzbekistan), 14 – 22 April 2024

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Dust belt and location of CADUC-2



Goals of CADUC-2

 Promote <u>discussions</u> between scientists who study dust in the atmosphere and at Earth's surface, especially in Central Asia

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- Summarize textbook knowledge of atmospheric dust and new insights into dust, identify differences between Central Asian dust and Saharan dust and dust from other deserts, and derive conclusions
- Education/training of young scientists and technicians, administrative staff (capacity building) on 14 April 2024 (will take place in case of additional funding)
- <u>Characterization</u> of dust in the atmosphere and on the earth's surface at source areas, transport, deposition areas, and dust impacts on humans, plants, economies, etc.
- Description of possible vulnerabilities and actions: to avoid dust events, as well as precautions when dust events occur (warning systems of/for countries)
- Description of possible predictions and scenarios (diseases, plant growth, well-being, etc), if nothing is done against dust distribution
- **Policy recommendations** resulting from the scientific findings

Links to conference, registration, abstract delivering system

Deadlines



Planned sessions

1 Atmospheric dust at source regions

2 Dust properties at transport

3 Atmospheric dust at sink regions

4 Aral Sea region as dust source and dust sink

5 Impacts of atmospheric dust

6 Dust early warning systems

Success stories in controlling sand and dust storm (SDS) hotspots

Abstract submission system is open

Deadline for submitting the 4-pages abstracts: 1 October 2023

Deadline for submitting the registration sheets: 1 October 2023

Notification about acceptance and requests for revising of abstracts: **1 December 2023**

Deadline for payment of conference fees: 1 January 2024

Deadline for submitting the revised versions of abstracts: 1 February 2024

Where: Karakalpak State University (KSU)



Special rounds to discuss policy recommendations resulting from the scientific findings

Conference:

- 14 April 2024: lectures for capacity building
- **15 19 April 2024:** Meetings in Nukus and trip to Muynak
- **20 22 April 2024: Post congress to Khiva and Bukhara**

Conference trip to the former Aral Sea (Muynak)



Post-Conference Excursion:



CADUC-1 - a great success:

https://www.e3s-conferences.org/caduc-2019



from session: **Dust at Source Regions**

Saline dust storms



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from session: **Dust at Transport**

Decade of CALIPSO observations of Asian and Saharan dust properties near source and transport regions



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from session: Dust impacts on radiative effects of black Dust at carbon aerosol forcing Sink Regions Composition of the dust aerosol on period of dust storms in Tajikistan 1.76%_ 2.21% 3.67% 60°E K20 1.91% © Ina Tegen and Bernd Heinold 0.33% P205 © Mukhammad I. Khodzhakhon et al.

from session: Impacts of Dust

Spectral-temporal behaviour of Persian Oak (Quercus Brantii Lindl)'s under the stresses of water deficiency and dust particles



© Ali Darvishi Boloorani et al

download link for this poster

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