



The Israeli Association for Aerosol Research

האגודה הישראלית לחקר אוירוסולים

<http://nasa.proj.ac.il/iaar>

IAAR 23rd Annual Meeting

הכנס השנתי ה-23

יום רביעי, כ"ו בשבט תש"ע Wednesday, February 10, 2010

המכון למדעי כדור הארץ, האוניברסיטה העברית בירושלים

Earth Sciences Institute, The Hebrew University of Jerusalem.

Room 109

8:15 – 9:10 Registration

registration fee – 20 NIS for students

50 NIS for non-students

9:10 - 9:15 Opening session – Yigal Erel, Chair of The Institute of Earth Sciences

Session I: Atmosphere I

Chair: A. Khain

9:15 How much water can pollution aerosols hold in the clouds by suppressing warm rain?

D. Rosenfeld

The Hebrew University of Jerusalem

9:30 Synoptic Classification of MODIS Aerosols over Israel

P. Alpert and Y. Carmona

Tel Aviv University

9:45 Measurement of Immersion Freezing Nuclei in Antarctica

K. Ardon-Dryer and Z. Levin

Tel Aviv University

10:00 Clay Mineral Signatures in Saharan Dust in the Eastern Mediterranean

E. Ganor and A. Stupp

Tel Aviv University

10:15 Evaluation of sea-salt aerosol forecasts in the open sea

P. Kishcha, A. Luvchik, Y. Agnon and P. Alpert

Tel Aviv University

10:30 Synoptic analysis of a rare event of Saharan dust reaching the Arctic Region

J. Barkan

Tel Aviv University

10:45 Application of RegCM3 for regional climate studies

S. Krichak

Tel Aviv University

11:00 - 11:15 Coffee break

Session II: Health

Chair : D. Broday

- 11:15** Assessing contribution of air pollutants from local Urban sources during the Day of Atonement
Y. Erel, J. Schpund, U. Dayan, L. Kordova, A. Wanger and J. Schuer
The Hebrew University of Jerusalem
- 11:30** Integration of satellite observations and ground monitoring and its application for assessing exposure to PM in Israel
M. Sorek-Hamer and D. Broday
Technion, Haifa
- 11:45** 3rd Hand Smoking; Heterogeneous Oxidation of Nicotine and Secondary Aerosol Formation in the Indoor Environment
L. Petrick and Y. Dubowski
Technion, Haifa
- 12:00** Induced Particle Grouping and Coagulation in Diesel Exhaust
I. Hite, M. Ruzal, T. Shakked, E. Sher and D. Katoshevski
Ben-Gurion University of the Negev, Beer-Sheva
- 12:15** Dynamics of Exhaled Aerosol
D. Parienta and D. Katoshevski
Ben-Gurion University of the Negev, Beer-Sheva

Session III: Theory and modeling I

Chair: M. Shapiro

- 12:30** Simultaneous Retrieval of the Complex Refractive Indices of the Core and Shell of Coated Aerosol Particles from Extinction Measurements Using Simulated Annealing
C. Erlick-Haspel, M. Haspel and Y. Rudich
The Hebrew University of Jerusalem / Weizmann Institute of Science
- 12:45** Complex-valued variable and solutions for boundary layers with droplets/particles
R. Orland and D. Katoshevsky
Ben-Gurion University of the Negev, Beer-Sheva

13:00 - 14:00 **Lunch** - Beit Belgia, 200 m from the Institute of Earth Science

14:00 - 14:15 **IAAR general meeting**

Session IV: Atmosphere II

Chair: Z. Levin

- 14:15** Effect of Rain Scavenging on Altitudinal Distribution of Soluble Gaseous Pollutants in the Atmosphere
T. Elperin, A. Fominykh, B. Krasovitev and A. Vikhansky
Ben-Gurion University of the Negev/ University of London, London, UK
- 14:30** Turbulent effects on cloud microstructure and precipitation of deep convective clouds as seen from simulations with a 2-D spectral microphysics cloud model
N. Benmoshe, A. Khain, M. Pinsky, and A. Pokrovsky
The Hebrew University of Jerusalem

- 14:45** Effects of stratocumulus clouds on aerosols in the maritime boundary layer
L. Magaritz, M. Pinsky and A. Khain
The Hebrew University of Jerusalem
- 15:00** The possible role of small aerosols in the microphysics and lightning of deep maritime clouds
A. P. Khain, A. Pokrovsky and N. Benmoshe
The Hebrew University of Jerusalem

15:15 - 15:30 Coffee break

Session V: Theory and modeling II **Chair: T. Elperin**

- 15:30** Characterization of soot agglomerates by mobility, vacuum aerodynamic diameter and mass
M. Shapiro, P. Vainshtein, D. Dutcher, M. Emery, M. Stolzenburg, D.B. Kittelson, P.H. McMurry
Technion, Haifa / University of Minnesota, Minneapolis, USA
- 15:45** Tangling Clustering of Inertial Particles in Stably Stratified Turbulence
A. Eidelman, T. Elperin, N. Kleerorin, B. Melnik and I. Rogachevskii
Ben-Gurion University of the Negev
- 16:00** Near-ground hyperspectral imaging for urban scale remote sensing of aerosols, during nighttime
Y. Etzion, D.M. Broday, T. Kolatt, and M. Shoshany
Technion, Haifa / ASI
- 16:15** The Orientations of Prolate Ellipsoids in Linear Shear Flows
E. Gavze, M. Pinsky, A. Khain
Israel Institute for Biological Research / The Hebrew University of Jerusalem

16:30 Closing session