



# e-bulletin

Vaksis Vacuum Systems Bulletin  
Year: 3, No: 8, December 2013

## PVD AND CVD COATING SYSTEMS FOR VARIOUS APPLICATIONS

[www.vaksis.com](http://www.vaksis.com)



**twin system**



**new product**

**MiDAS Twin System**  
PVD/1eB ve PVD/1M3T



**activities**

- PVD: Physical Vapor Deposition
- CVD: Chemical Vapor Deposition

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## Twin System

Dear Reader,

Academician who wants to research feel himself/herself bad in case of low budget. His/her alternatives are like that:

A: He/she may give up executing the project: negative situation for his/her research life

B: He/she may have to buy the device which is not good quality but suitable for his/her budget: he/she has colleagues who faces with the same situation and knows from their experiments. Their bad quality devices break down frequently. Producing company (or representative) does not pay attention to this situation, it is not possible test again the experiments which were done by them, etc. For these reasons, the fear of not finishing project on time turns into a nightmare.

C: Instead of the device which is extensive and suitable for his/her project, he/she can buy the device which has low specification but good quality: He/she could not test every experiment that he/she needs by himself/herself, he/she has to test some experiments at another laboratories. He/she knew from previous experiments that they do not pay attention or the experiments are not tested on time. The nightmare still continues.

At that point, as Vaksis, we offer a solution to a project manager: VAKSİS TWIN SYSTEM



**Dr. Baybars ORAL**  
**COMPANY MANAGER**

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There is not any restriction on quality in Vaksis twin systems but the cost is reduced. All sub units which used in two separate system also exist in twin system. The difference from two separate system is some of the system parts are shared between two units.

Vacuum pumps, pressure gauges, gas flow control devices, RF and/or DC power supplies, automation and control, etc. are used in one set instead of two sets and savings can be achieved. In this way, the limit of the project budget is enough/sufficient. Besides, due to the some of the components' common producing, reduced production costs are reflected to the prices and more savings can be achieved.

The other advantage of twin systems is coating of the thin film types which are not compatible with each other (e.g. Zn, Sn, Si, Pt, Cd etc. materials with organic materials) by not polluting each other in crosswise manner. (By this system, the thin film types which are not compatible with each other (e.g. Zn, Sn, Si, Pt, Cd etc. materials with organic materials) can be coated by not polluting each other in crosswise manner) Similarly, using in the same twin system of deposition techniques which are not compatible with each other (e-beam and sputtering or PVD and CVD or ICP-plasma CVD and LP-CVD) reduces system costs.

Based on these requirements, 5 science groups prefer Vaksis "Twin" system up to the present.

Precious scientists! If you consider that you need a twin system, please contact me and let us create a solution together.

Before ending my letter, as Vaksis family, we wish the New Year will bring beautiful days to you, to our country and to the world.

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## new product

MIDAS Twin System

PVD/1eB ve PVD MT/1M3T

System is comprised of two different chambers with a common pumping station. One of the chambers utilizes e-beam and the other utilizes sputtering and thermal evaporation techniques.



### Technical Specifications

Base pressure:  $< 2 \times 10^{-7}$  torr

Substrate Size: 4" diameter

Substrate Rotation: 3-30 rpm

Number of sources: 3 resistive TE

1 off 2" magnetron

1 e-beam evaporator source

Power generators: 3

Control: Full automation by PC

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## activities

*Which we attended...*

### NANO<sup>TR</sup>-9

9<sup>th</sup> Turkey Nanoscience -Nanotechnology Conference:  
NanoTR-9 (24-28<sup>th</sup> June 2013)

<http://www.nanotr9.org/>

9<sup>th</sup> Nanoscience-Nanotechnology Conference was held in Erzurum with hosting of Atatürk University pursuant to Eurasian Silk Road Universities Consortium (ESRUC) Science and Technology Forum.

Vaksis supported this event as a sponsor and participant and met with the relevant participant during the event.



### Solar Energy for World Peace

Solar Energy for World Peace  
(17-19<sup>th</sup> August 2013)

<http://solar4peace.org/default.asp>

International Solar Energy for World Peace conference which was organized by Johannes Kepler University – Linz Institute for Organic Solar Cells (LIOS) was held at İstanbul Lütfi Kırdar Convention &Exhibition Centre

Scientists who are expert in solar energy field attended to this conference. Vaksis supported this event as a sponsor and participant.



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## activities

*which we attend...*



**28<sup>th</sup> European PV Solar Energy Conference and Exhibition, Paris-France (1-3 October 2013)**

<http://www.photovoltic-conference.com/>

28<sup>th</sup> European PV Solar Energy Conference and Exhibition (28<sup>th</sup> EU PVSEC) which is the biggest photovoltaic events of the European was held in Paris.

Vaksis attended to this organization as a participant and met with the relevant participants at the fairground.



**19<sup>th</sup> Condensed Matter Physics Ankara Meeting (20<sup>th</sup> December 2013)**

<http://www.fen.bilkent.edu.tr/~ymf/index.php>

This year, 19<sup>th</sup> Condensed Matter Physics 2013 was held at Mithat Çoruh Lecture Hall with hosting of Bilkent University.

By supporting this conference as a sponsor and participant, Vaksis met with the relevant participants and informed them about Vaksis products in detail.



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## activities

*Which we will attend...*

### International Semiconductor Science & Technology Conference ISSCT2014 (13-15 January 2014)

<http://www.issct2014.org/>

International Semiconductor Science & Technology Conference (ISSCT) will be held by İstanbul Medeniyet University in İstanbul.

Vaksis will support this activity as a sponsor and participant. You can visit our booth and get information about Vaksis products in detail during the event.

### International Winterschool on Bioelectronics Tirol, Avusturya (22<sup>nd</sup> February - 1<sup>st</sup> March 2014)

<http://www.jku.at/conferences/content/e216103>

International Winterschool on Bioelectronics which is organized by Austria Johannes Kepler University will be held in Tirol, Austria between 22nd February-1st March 2014.

Vaksis will support this activity as a main sponsor. You can visit our booth and get information about Vaksis products in detail.



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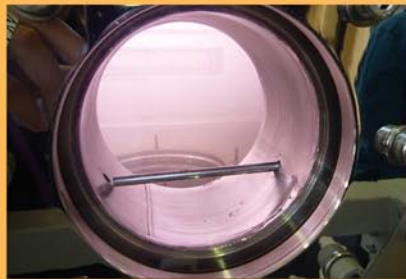
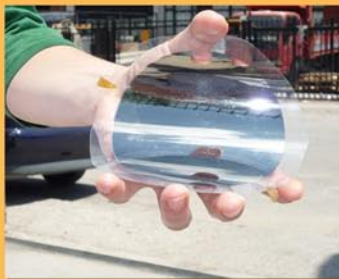
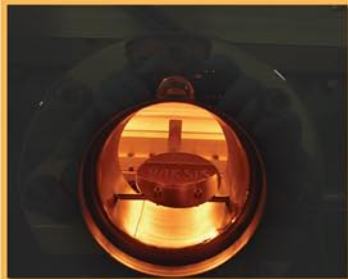
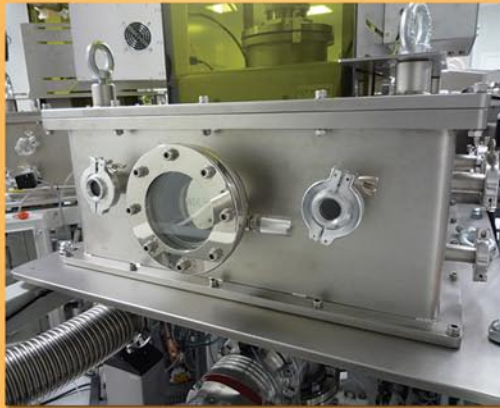
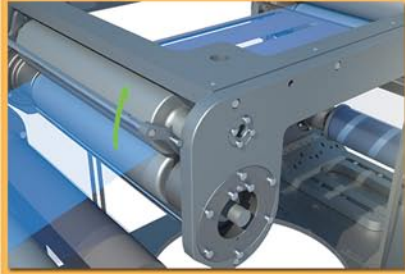
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ATGB, Cyberplaza B-220  
Bilkent, Ankara, Türkiye