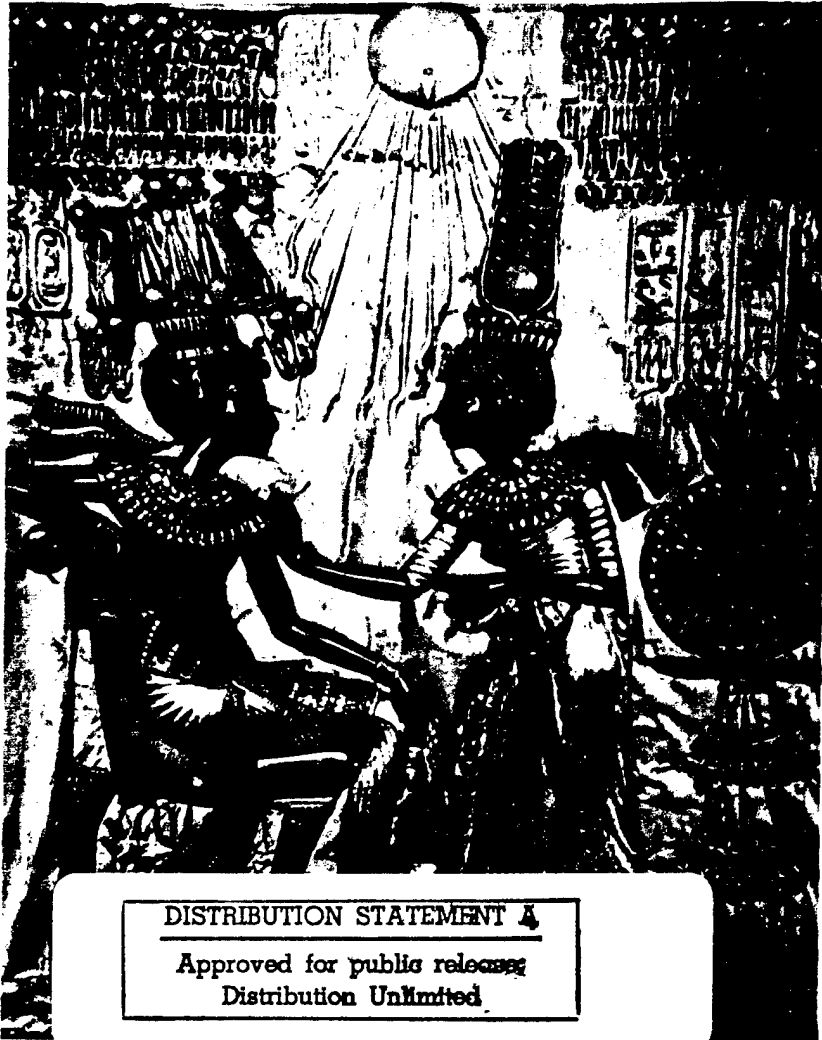




3 RD. INTERNATIONAL CONFERENCE
SOLAR ENERGY STORAGE AND
APPLIED PHOTOCHEMISTRY,
Cairo, Egypt
8-14 January 1995

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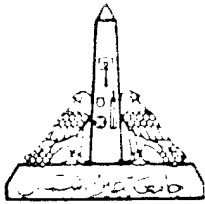
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Photoenergy Centre
Faculty of Science
Abbassia, Cairo, Egypt

**3rd INTERNATIONAL
CONFERENCE**

**SOLAR ENERGY
STORAGE & APPLIED
PHOTOCHEMISTRY**

8-14 January 1995

**Honorary Presidents of the
Conference**

Abdel-Hafez A. M.

The President of Ain Shams University

Rabie A. M.

The Dean, Faculty of Science

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**PHOTOENERGY CENTRE
FACULTY OF SCIENCE
AIN SHAMS UNIVERSITY (ASU)
CAIRO, EGYPT**



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**3rd INTERNATIONAL
CONFERENCE**

**SOLAR ENERGY
STORAGE & APPLIED
PHOTOCHEMISTRY**

8-14 January 1995

EGYPTIAN ENVIRONMENT AFFAIRS
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MINISTRY OF SCIENTIFIC RESEARCH
MINISTRY OF INTERNATIONAL
COOPERATION
SUPREME COUNCIL OF UNIVERSITIES
JPA (Japan) & ICS/ICTP (Trieste, Italy)
US AIRFORCE,
US NAVY AND US ARMY, RESEARCH
OFFICES (UK)

**Honorary Presidents of the
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AIN SHAMS UNIVERSITY (ASU)
CAIRO, EGYPT

Cosponsored by

MINISTRY OF EDUCATION
MINISTRY OF PETROLEUM,

Dear Friends and Colleagues

The Conference (Solar '95) is almost upon us. The provisional program has been already distributed. Details will be made available upon arrival. If you have not registered yet, early registration is advisable. We plan to pick you up from the Cairo International Airport. Therefore, please provide us with details of your flight.

In our planning we have tried to maintain a strong focus on our chosen theme-Photochemical Storage of Solar Energy and applied Photochemistry. We are committed to providing an array of presentations that meet the interests of photoscientists.

Looking very much forward to seeing you in Cairo very soon.

Abdel-Mottaleb, M.S.A.

Chairman, Organising Committee

PROGRAMME STRUCTURE

The scientific programme consists of:

* **plenary** (PL- 45 Mins.), **keynote** (KL- 35 mins.) lectures and **short talks** (ST- 25 mins.) plus 10 mins. for discussions.

* **poster sessions.** Poster format is 120 cm high x 75 cm width.

* **an exhibition,** companies interested in exhibiting products (instruments, books, magazines, computer software, video's, etc.) should contact the chairman of the organizing committee. Space is on a first come first served basis and is limited.

An outstanding list of speakers has been assembled, addressing topics of general interests and of applied nature:

ABD EL AZZIZ, A. S. (CANADA)

PHOTOLYSIS OF POLYAROMATIC ETHERS AND THIOETHERS WITH PENDANT CYCLOPENTADIENYLIRON MOIETIES

AL-HASSAN, K. (JORDAN)

FREE VOLUME SENSING FLUORESCENCE "TICT" PROBES FOR CYCLODEXTRINS INTERIOR

ALI, S. I. (INDIA)

PHOTOEXCITATION OF TRANSITION

METAL COMPLEXES IN ORGANIC SUBSTRATES

ALONSO-VANTE, N. (GERMANY)

THE SIGNIFICANCE OF SURFACE STATES FOR PHOTOELECTROCATALYSIS AT THE SEMICONDUCTOR/ELECTROLYTE INTERFACES

AZUMI T (JAPAN),

BADR, M. Z. (EGYPT)

PHOTOLYSIS AND PYRROLYSIS OF ACID AMIDES AND SULPHONAMIDES; MECHANISTIC STUDIES

BILLING, R. (GERMANY)

SELECTIVE OXIDATION OF ALCOHOLS BY DIPHENYLIODONIUM IONS IN A PHOTOINDUCED CHAIN REACTION

BOLTON, J. (CANADA)

SOLAR DETOXIFICATION OF WASTE WATER

BOXER, S. (USA)

MECHANISM OF THE EARLY STEPS IN PHOTOSYNTHESIS

BRASLAVSKY, S. (GERMANY),

TIME-RESOLVED PHOTOTHERMAL MEASUREMENTS ON BIOLOGICAL PHOTORECEPTORS

CALDWELL, R. (USA)

APPLICATIONS OF TIME-RESOLVED PHOTOACOUSTIC CALORIMETRY IN

ORGANIC CHEMISTRY

CALZAFERRI, G. (ZWITZERLAND)
DYE MOLECULES IN ZEOLITES AS
ARTIFICIAL ANTENNA SYSTEMS

DE SCHRYVER, F. C. (BELGIUM)

DOEPP, D. (GERMANY)
REGIO- AND STEREOSELECTIVITY IN
LIGHT INDUCED [4+2]-CYCLOADDITIONS
OF ALPHA-CYANOENAMINES TO
AROMATIC CARBONYL COMPOUNDS,
NITRILES AND HYDROCARBONS

DUERR, H. (GERMANY)
MOLECULAR AND SUPRAMOLECULAR
SYSTEMS IN PHOTOCROMISM

EL-SAYED, M. A. (USA)

ESPLUGAS, S. (SPAIN)
DESTRUCTION OF WATER
CONTAMINANTS USING UV/ OXIDANT
METHODS

ETMAN, M. (FRANCE)
PHOTOELECTROCHEMICAL STUDIES ON
ANODIC DISSOLUTION OF Si
SEMICONDUCTORS

FARA, L. (ROMANIA)
PHOTOPHYSICAL & PHOTOCHEMICAL
PROPERTIES OF DYE MOLECULES IN
POLYMERS USED FOR FLUORESCENT
SOLAR CONCENTRATORS.

FITZMAURICE, D. (IRELAND)
HETROSUPRAMOLECULAR CHEMISTRY:
AN APPROACH TO MODULATING
FUNCTION IN MOLECULAR DEVICES.

FUJIMURA Y (JAPAN)

GEORGE, K. (INDIA)
METAL RECOGNITION AND PHOTO -
SENSITIZING PROPERTIES OF NOVEL
SQUARINE DYES

GETOFF, N. (AUSTRIA)

GILBERT, A. (UK)
PHOTOCHEMISTRY AS A CLEAN
TECHNOLOGY FOR SYNTHESIS OF
EFFECT CHEMICALS

GREVELS, F. (GERMANY)
PHOTOLYSIS OF GROUP 8 METAL
CARBONYLS: TRANSIENT IR
SPECTROSCOPY, PHOTOKINETICS AND
QUANTUM YIELDS OF CO SUBSTITUTION

GRAETZEL, M. (SWITZERLAND)
NANOCRYSTALLINE SOLAR CELLS;
SCIENTIFIC PRINCIPLES AND ECONOMIC
PERSPECTIVES

GUILLET, J. (CANADA)
SOLAR SYNTHESIS OF HYDROGEN
PEROXIDE

HARRIMAN, A. (USA)
PHOTOCHEMOTHERAPY WITH CYANINE
DYES

HAU, D.-M. (TAIWAN)
 PHOTOCHEMOTHERAPY ON
 EXPERIMENTAL TUMOR WITH
 PHOTOFRIN II AND LASER

HILL, C. (USA)
 EXCITED STATE CHARACTERISTICS AND
 NEW UNACTIVATED C-H BOND
 FUNCTIONALIZATION PHOTOCATALYSIS
 BY W10 O32 4-

HOFFMAN, M. (USA)
 ELECTROLYTE AND TEMPERATURE
 EFFECTS IN PHOTOINDUCED
 INTRAMOLECULAR ELECTRON-
 TRANSFER REACTIONS

KHAN, M. K. A. (BANGLADESH)
 STUDY OF A CuO_2 BASED
 PHOTOELECTROCHEMICAL SOLAR
 CELLS

KOSSANYI, J. (FRANCE)

KRISHNAN, V. (INDIA)
 NON-PLANAR PORPHYRIN MOLECULAR
 ASSEMBLIES

KORPPI-TOMMOLA, J. (FINLAND)
 SELFORGANIZATION OF CHLOROPHYLLS
 IN HYDROCARBON SOLUTION AND IN
 VIVO SYSTEMS: PICO- AND
 FEMTOSECOND RELAXATION IN WATER
 BOUND CHLA AGGREGATES AND CL.
 TEPIDUM CHLOROSOMES

KURRECK, H. (GERMANY)
 MIMICKING PRIMARY PROCESSES OF
 PHOTOSYNTHESIS MODEL COMPOUNDS,
 LIGHT-INDUCED CHARGE SEPARATION.

KUZMIN, M. (RUSSIA)
 PHOTOINDUCED PROTON TRANSFER IN
 ORGANIZED MOLECULAR SYSTEMS

LEUPOLD, D. (GERMANY)
 CHARACTERIZATION OF
 PHOTOSYNTHETIC ANTENNAS BY
 NONLINEAR POLARIZATION
 SPECTROSCOPY (FREQUENCY DOMAIN)

**LOEHMANNROEBEN, H.-G.
 (GERMANY)**
 FLUORESCENCE OF POLYNUCLEAR
 AROMATIC COMPOUNDS AND MINERAL
 OILS IN ENVIRONMENTAL MONITORING

LOUTFY, R. O. (CANADA)

MASUHARA, H. (JAPAN)

MAZZUCATO, U. (ITALY)
 PHOTOCHROMIC MATERIALS: A
 COMPREHENSIVE KINETIC
 THERMODYNAMIC AND
 PHOTOCHEMICAL STUDY

MELE, A. (ITALY)
 PULSED LASER ABLATION: THIN FILM
 PRODUCTION AND COATING, PROCESS
 DIAGNOSTICS

MEMMING, R. (GERMANY)

MORRISON, H. (USA)
PHOTOCHEMICAL REARRANGEMENTS
OF OXAZIRIDINES

NAVIO, J. A. (SPAIN)
PHOTODEGRADATION OF BUTYL TIN
COMPOUNDS IN WATER:
ENVIRONMENTAL IMPLICATIONS

OPPENLAENDER, T. (GERMANY)
NOVEL VACUUM-UV-(VUV) AND UV-
EXCIMER FLOW THROUGH
PHOTORECTORS FOR WAST WATER
TREATMENT AND FOR WAVELENGTHS
SELECTIVE PHOTOCHEMISTRY

OZANAM, F. (FRANCE)
IN-SITU INFRARED STUDY OF THE
INTERFACIAL LAYER DURING THE
ANODIC DISSOLUTION OF A SILICON
ELECTRODE IN A FLUORIDE
ELECTROLYTE

RAHMAN, N. (ITALY)

SABBATINI, N. (ITALY)
LUMINESCENCE OF INCLUSION
COMPLEXES OF LANTHANIDE IONS

SONG, P.-S. (USA)
PHYTOCHROME AS LIGHT SENSOR FOR

PHOTOSYNTHETIC GENE ACTIVATION

SPANHEL, L. (GERMANY)
SOL-GEL SYNTHESIS AND
SPECTROSCOPIC PROPERTIES OF
NANOSCALED HYBRID MATERIALS

TAKASHI, I. (JAPAN)
PHOTOCATALYTIC REDUCTION OF
CARBON DIOXIDE WITH WATER

TERENETSKAYA, I. (UKRAINE)
AN IN VITRO MODEL OF PREVITAMIN D
PHOTOSYNTHESIS AS POSSIBLE
MONITOR OF SOLAR UVB RADIATION:
KINETIC STUDIES USING TUNABLE
LASER

TESTA, A. (USA)
PHOTOINDUCED PROTON TRANSFER IN
SUBSTITUTED PYRIDINES

TOLBERT, L. (USA)
EXCITED-STATE PROTON TRANSFER IN
CONSTRAINED ENVIRONMENT

TOKUMARU, K. (JAPAN)
ROLE OF HIGHER EXCITED STATES IN
ORGANIC PHOTOCHEMISTRY

TRIBUTSCH, H. (GERMANY)
PHOTOCHEMICAL ENERGY
CONVERSION: IRREVERSIBILITY AS A
CHANCE

TROZZOLO A (USA)
CREATION AND DETECTION OF

REVERSIBLE PHOTOCHEMICALLY
GENERATED INTERMEDIATES

WAGNER, P. J. (USA)

TRIPLET STATE RADICAL CLEAVAGE OF
RING SUBSTITUENTS ON PHENYL
KETONES: DIFFERENT MODES FOR
DIFFERENT ELECTRONIC STATES

WILLIG, F. (GERMANY)

INJECTION AND DISCHARGE OF PHOTO-
GENERATED CHARGE CARRIERS AT THE
SEMICONDUCTOR/ ELECTROLYTE
INTERFACE

WELLER, A. (GERMANY)

PHOTOINDUCED ELECTRON TRANSFER
REACTION IN FLEXIBLE LINKED
DONOR-ACCEPTOR SYSTEMS

WILKINSON, F. (UK)

WULFMAN, C. (USA)

CATASTROPHIC POLARIZATION OF
TWISTED EXCITED STATES

YAMAUCHI, S. (JAPAN)

TIME-RESOLVED EPR STUDIES ON THE
EXCITED POLYMERS OF SANDWICH
PARALLEL TYPE IN PORPHYRINS AND
PHTHALOCYANINES

YANAGIDA, S. (JAPAN)

PHENAZINE-PHOTOSENSITIZED
REDUCTION OF CO₂ MEDIATED BY
COBALTCYCLAM COMPLEXES

ZACHARIASSE, K. A. (GERMANY)

INFLUENCE OF ENERGY GAP $\Delta E(S_1, S_2)$ AND AMINO N-INVERSION IN
INTRAMOLECULAR CHARGE TRANSFER.
DUAL FLUORESCENCE AND SINGLE CT-
EMISSION

ZENKEVICH, E. I. (BELARUS)

DIPOLE-DIPOLE AND EXCHANGE
ENERGY TRANSFER IN DIFFERENT
TYPES OF PORPHYRIN CHEMICAL
DIMERS

ZEWAIL, A. H. (USA)

ZIMMERMAN, H. (USA)

RECENT ADVANCES IN MECHANISTIC
AND EXPLORATORY ORGANIC
PHOTOCHEMISTRY

BOOK OF ABSTRACTS

The abstracts of all contributions will be
compiled in the Book of Abstracts,
which will be distributed to all
participants upon arrival.

CONFERENCE PROCEEDINGS

The conference proceedings will be
published in the Proceedings of the
Indian Academy of Sciences, Chemical
Sciences. Full papers (maximum of 15
pages' A4 format) will be published in
the proceedings of the conference. It is
expected to appear in September 1995.
Authors should submit their manuscripts

at the conference at the latest. Instructions for authors are given at the end of this circular.

GENERAL INFORMATION

Conference flow is given below. Registration starts at 12.00 pm on Sunday 8, 95 (Le Meridien Hotel Heliopolis). The scientific sessions of the meeting start on Monday morning, 9 January and ends on Saturday, 14 January.

ACCOMMODATION

A block of rooms has been reserved to accommodate the conference participants at Le Meridien hotel at reduced Rates. Rates per person/night - Breakfasts, Lunches and Refreshments at Breaks will be provided. Taxes and service inclusive. A hospitality desk will be available at Le Meridien Hotel for the convenience of the delegates to offer wide range of assistance. Hotel reservation cannot be confirmed without receiving one night deposit.

A shuttle bus service is available (free of charge) from/to the Airport. To facilitate picking you up from the Airport, please send us full details about your flight to Cairo (one week before arrival, at least).

A representative of Ain Shams University will meet, welcome and assist Conference attendees inside Cairo

Airport, through passport and custom formalities, provide visa (on the spot) if necessary. (All Egyptian consulates grant entry visas without restrictions).

* Confirming Reservation

As soon as possible we will send a receipt of the payment and the voucher for the booked Hotel. Please send us a copy of the Bank Transfer Document.

INTERNATIONAL TRAVEL

Egypt Air has been appointed official carrier to the Conference. Please contact the nearest Egypt Air office in your country. The organisers request that all persons travel by Egypt Air.

CLIMATE AND CLOTHING

Cairo invites you to come and enjoy its beautiful weather and shining sun. The climate is dry all the year round. In January, the cool season, the temperature ranges between 8-18 C. Medium weight clothing, and possibly a top coat would be suitable. For Welcome Reception and Banquet, Jacket and tie/Cocktail dress are preferable. There is no formal dress for the day functions.

SOCIAL EVENTS AND EXCURSIONS

Egypt has immense tourist potentials making it a touristically- attractive State of the first type.

A full programme of social events is planned for all attendees (free of charge), to include: Welcome Reception/Dinner: Sunday 8 January. Wednesday 11 January is being set aside for organised excursion to the Egyptian Museum of Antiquities, Pyramids of Giza and Sphinx & Sound and Light Show at the Pyramids.

There will in addition be a full programme of daytime events for the accompanying persons, include tours to visit some touristic landmarks in Cairo and Giza: Memphis and Sakkara, Citadel, Mohamed Ali Mosque, Khan El-Khalili Bazaars, Tower of Cairo, Coptic Museum etc. Details of all events will be available upon arrival.

CONFERENCE BANQUET

Friday evening January 13, Oriental Evening: Egyptian traditional music and entertainments will be provided; (Tickets : \$60 US).

PRE/POST-CONFERENCE TOURS

We are not going to organise any pre/post-conference tours. However, for private reservation and information

concerning tours, we recommend you directly contact American Express of Egypt, Ltd, main office 21 Giza Street, Nile Tower, Giza, Egypt, Tel: (+202) 5703159 or 5703411. Group rate is expected to be given for a group which consists of 10 members at least.

Notes on the Preparation of Papers

Authors wishing to have papers published in the Proceedings should submit three sets (one original and two copies) of the paper to the Chairman of the Conference at the Conference.

Typescript: Papers should be typed double spaced with ample margin on all sides. This also applies to the abstract, tables, figure captions and the list of references which are to be typed on separate sheets.

Title Page: 1- The title of the paper must be short and contain words useful for indexing. 2- The names with initials of authors and the name and address of the institution where the work was done must be given. 3- An abbreviated running title of not more than 50 letters and spaces must also be given.

Abstract. All papers must have an abstract of not more than 200 words of

the significant results reported in the paper. Presentation of numerical results should be avoided as far as possible in the abstract.

Keywords. Between 3 and 6 keywords must be provided for indexing and information retrieval.

The Text. The paper must be divided into sections starting preferably with 'Introduction' and ending with 'Conclusions'. The main sections should be numbered 1,2, etc. Subsections 1.1, 1.2, etc. and further subsections 1.1a, 1.1b, etc.

Tables. All tables must be numbered consecutively in Arabic numerals in the order of appearance in the text. They should be self-contained and have a descriptive title.

Figures. All figures including photographs should be numbered consecutively in Arabic numerals in the order of appearance in the text. Figure captions must be typed on a separate sheet. Line drawings must be in India ink on good quality tracing paper or on white card of a size smaller than that of the text paper. Structural formulae of compounds must be drawn in India ink on tracing paper. Lines must be drawn sufficiently thick for reduction to a half or third of the original size (0.3 mm for axes and 0.6 mm for curves are suggested).

References. Should be stated in the text

by author and year. If there are more than two authors, reference should be to the first author followed by et al in the text. References at the end of the paper should be listed alphabetically by authors names, followed by initials, year of publication, name of the journal (abbreviated according to the world list of scientific periodicals, Butterworths, London), volume number, and number of the first page. References to books should include: name(s) of author(s), initials, year of publication, title of the book, edition if not the first, initials and name(s) of editor(s) if any, preceded by ed(s), place of publication, publisher and chapter or pages referred to. References to thesis must include the year, the title of the thesis, the degree for which submitted and the university. References to reports and unpublished conference proceedings should include the title of the report/paper.

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FOR FURTHER INFORMATION CONTACT

Prof. Abdel-Mottaleb, M.S.A.
PHOTOENERGY CENTRE,
FACULTY OF SCIENCE
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ABBASSIA, CAIRO, EGYPT
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E-MAIL : SOLAR@FRCU.EUN.EG
FAX: +2 02 8222 84

CONFERENCE FLOW (TENTATIVE)

Date	Morning 08.30-12.30	Afternoon 14.00-18.00	Evening
Sunday	Registration		Opening Remarks
8 January			Invited Lectures Reception
Monday	Invited Lectures		Invited Lectures
9 January		Poster I	
Tuesday	Invited Lectures		Invited Lectures
10 January		Poster II	
Wednesday	MUSEUM OF ANTIQUITIES, PYRAMIDES		
11 January	AND SPHINX		
Thursday	Invited Lectures		Invited Lectures
12 January		Poster III	
Friday	Invited Lectures		BANQUET
13 January		Poster IV	
Saturday	Invited Lectures		
14 January	Closing Remarks		

Coffee/Tea: 10.10-10.40 15.40-16.10

Lunch: 12.30-14.00

Participants will receive a detailed schedule of the Conference events upon arriving at the Conference.

Last minute registration may be also accepted. Please contact the chairman immediately.

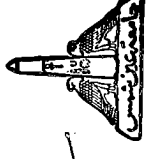
Prof. ABDEL-MOTTALEB, M.S.A.

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AIN SHAMS UNIVERSITY,

ABBASSIA, C A I R O, E G Y P T



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علوم عين شمس