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ECBA-2016

**December 29-30, 2016
Cairo, Egypt**



CONFERENCE PROCEEDINGS

BOOK OF ABSTRACT ECBA-2016

**International Conference on
“Engineering & Technology, Computer, Basic & Applied
Sciences”
(ECBA-2016), Cairo, Egypt**

Book of Abstract Proceedings

**International Conference on
“Engineering & Technology, Computer, Basic & Applied
Sciences”
(ECBA-2016)
Cairo, Egypt**

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(ECBA-2016)”

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**International Conference on
“Engineering & Technology, Computer, Basic &
Applied Sciences”
Cairo, Egypt**

**Venue: INTERCONTINENTAL Citystars, Omar Ibn
El Khattab Street, Heliopolis, Cairo, Egypt**

ORGANIZING COMMITTEE

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Conference Coordinator

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CONFERENCE CHAIR MESSAGE

Dr. Malika Ait Nasser

International Conference on “Engineering & Technology, Computer, Basics & Applied Sciences” serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honourable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let’s break all the discriminating barriers and get free from all minor affiliations. Let’s contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you.

Dr. Malika Ait Nasser

Conference Chair

Email: chair2016@academicfora.com

ECBA-2016

Conference Program

DAY 01 Thursday (December 29, 2016)

Welcome Reception & Registration

9:00– 9:30 am

Opening Ceremony (09:30 – 10:00 am)

Venue: Room 1

| | |
|--------------------|--|
| 09:30 am – 9:40 am | Introduction of Participants |
| 09:40 am – 9:50 am | Welcome Remarks – Mr. Metin – Conference Coordinator Academic Fora |
| 09:50am – 10.00 am | Group Photo Session |

Grand Networking Session and Tea Break (10:00– 10:30 am)

DAY 01 Thursday (December 29, 2016)

Session 1 (10:30 am – 12:00 pm)

Venue: Room 1

Session Chair: Mr. Leon Yap

Track A: Engineering and Technology, Computer, Basic and Applied Sciences

| | | |
|--------------|--|------------------|
| CRE-5126-113 | Properties of Cu (In, Ga, Al) Se ₂ Thin Films Fabricated by Magnetron Sputtering | Hani Elsayed Ali |
| CRE-5126-114 | Identifying and Classifying Factors Impacting the Selection of Onsite Renewable Energy Projects for Institutional Owners of Constructed Facilities | H. M. Elzarka |

Track B: Medical, Medicine and Health Sciences

| | | |
|--------------|---|----------------------|
| CRM-5126-105 | Nurse's Knowledge of Diabetes in Developed and Developing Countries | Abdullellah Alotaibi |
|--------------|---|----------------------|

Lunch Break (12:00-01:00pm)

Closing Ceremony

LIST OF CONFERENCE ATTENDEES

The following Scholars/ practitioners/educationist who don't have any paper presentation, however they will attending the conference as delegates & observers.

| Sr. No | Official ID | Name | Affiliation Details |
|---------------|--------------------|---------------------------|---|
| 1. | CRS-5126-106A | Meher Niger | American Institute of Bangladesh Studies (AIBS), Bangladesh |
| 2. | CRM-5126-102A | Ghada Hanna | CMU College of Medicine, USA |
| 3. | CRM-5126-103A | Samir Hanna | Marina Rehabilitation and Health Services, USA |
| 4. | CRM-5126-108A | Haya Abdullah Alhummiyany | King Abdulaziz University, Saudi Arabia |

DAY 02 Friday (December 30, 2016)

City Tour and Shopping Day

All respective guests are free to conduct their own sightseeing and tour. The second day of the event is reserved for this memorable purpose.



**TRACK A: ENGINEERIG & TECHNOLOGY,
COMPUTER, BASICS & APPLIED SCIENCES**



Properties of Cu (In, Ga, Al) Se₂ Thin Films Fabricated by Magnetron Sputtering

Hani Elsayed Ali^{1*}, Talaat A Hameed², Wei Cao³

^{1, 2, 3} Old Dominion University, USA

Abstract

Cu(In, Ga, Al)Se₂ (CIGAS) thin films were studied as an alternative absorber layer material to Cu(In_xGa_{1-x})Se₂. CIGAS thin films with varying Al content were prepared by magnetron sputtering on Si(100) and soda-lime glass substrates at 350 °C, followed by post-deposition annealing at 500 °C for 5 hours in vacuum. The film composition was measured by an electron probe micro-analyzer while the elemental depth profiles were determined by secondary ion mass spectrometry. X-ray diffraction studies indicated that CIGAS films are single phase with chalcopyrite structure and that the (112) peak clearly shifts to higher 2θ values with increasing Al content. Scanning electronic microscopy images revealed dense and well-defined grains, as well as sharp CIGAS/Si (100) interfaces for all films. Atomic force microscopy analysis indicated that the roughness of CIGAS films decreases with increasing Al content. The bandgap of CIGAS films was determined from the optical transmittance and reflectance spectra and was found to increase as Al content increased.

Keywords: Solar Cell, CIGS, Sputtering

*All correspondence related to this article should be directed to Hani Elsayed Ali, Old Dominion University, USA.

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Identifying and Classifying Factors Impacting the Selection of Onsite Renewable Energy Projects for Institutional Owners of Constructed Facilities

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^{1,2,3} Department of Civil/Architectural Engineering and Construction Management, College of Engineering & Applied Science University of Cincinnati, USA

Abstract

Institutional owners own and operate multiple constructed facilities with similar size, architectural, and functional characteristics. Such owners are increasingly recognizing onsite renewable energy generation as an effective means of reducing their facilities' negative impact on the environment, lowering monthly utility bills, and improving the institution's public image. Onsite energy generation from renewable sources such as solar, wind, hydroelectric power, geothermal, biomass and biodiesel fuels have numerous applications and benefits; however, the success of a renewable energy project is dependent on a careful selection of the appropriate technology. Conventionally, the task of selecting an appropriate renewable energy technology is performed at the individual project/facility level where only site specific conditions are considered. However, there are many economic and operational benefits associated with considering institutional-wide factors when selecting optimum renewable energy technologies. The paper identifies and classifies factors impacting the selection of onsite renewable energy projects for institutional owners of constructed facilities. Identification of such factors is a first step needed for the development of a decision support system for selecting onsite renewable energy projects that consider both institutional-wide and project specific conditions in the selection process.

Keywords: Onsite Renewable Energy, Onsite Energy Generation

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TRACK B: MEDICAL, MEDICINE AND HEALTH SCIENCES



Nurse's Knowledge of Diabetes in Developed and Developing Countries

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Abstract

With a rising prevalence of diabetes world-wide, nurses have an important role in care of people with diabetes. This study aimed to critically appraise and synthesis the best available evidence of nurses' knowledge related to diabetes care, and to identify barriers to knowledge acquisition. We conducted a systematic search for English-language, peer reviewed quantitative, qualitative and mixed method publications via CINAHL, Medline, EMBASE, and Education Research Complete databases between 2004 and 2014. A total of 374 articles were retrieved. After removal of duplicates and quality assessment, 25 studies were included in the review. The reviewed studies originated from five continents, mainly from developed countries, and used a variety of study designs and tools to assess nurses' knowledge of diabetes. Aspects of diabetes care assessed included nurses' knowledge of: diabetes medications (12 studies), nutrition (7), blood glucose monitoring (8), diabetes complications (6), pathology, symptoms and diabetes management (9); factors/barriers affecting nurses' diabetes knowledge were described (11). Synthesis of the articles based on study designs, objectives, country of origin and assessment tools indicated that overall, substantial proportions of nurse in many countries and healthcare settings have suboptimal knowledge about diabetes and diabetes care. Nursing programs should review their opportunities for knowledge and skills acquisition related to diabetes care in academic and workplace settings both for introductory and continuing education and invest in educational innovation to maintain currency and up skill the workforce for this essential topic.

Keywords: CINAHL, Medline, EMBASE

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Business, Economics, Social Science & Humanities (BESSH) Conferences:

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Medical, Medicine & Health Science

<http://academicfora.com/medical-conference-home/>

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