Curriculum Vitae

**Reda Khalil**

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**EDUCATION**

# Ph.D. in Physics, 4th Physical Institute (Semiconductor physics) – Faculty of Science, Georg-August Uni. Goettingen, Germany 11/29/2004.

# M.Sc. in Physics –Faculty of Science - Benha University, Benha, Egypt, 1996.

* B.Sc. in Physics, Benha University, Benha, Egypt, 1990.

**POSITIONS HELD**

* Assistant Professor, physics department, Faculty of Science, Benha University, Egypt (2013 – in present).
* Assistant Professor, physics department, Faculty of Science, Tabuk University, KSA (2009-2013).
* Assistant Professor, physics department, Faculty of Science, Benha University, Egypt (2005 – 2009).
* Assistant Research, 4th Semiconductor Institute, Faculty of Science, George-August Uni., Gottingen, Germany (2000 - 2005).
* Assistant Lecturer, physics department, Faculty of Science, Benha University, Egypt (1996-1999).
* Demonstrator, physics department, Benha University, Egypt (1991 - 1996).

**RESEARCH INTEREST**

Vinyl polymerizations; polymer processing; carbon nanotube composites; polymer structure-property relations; thermal analysis - dielectric analysis, dynamic mechanical analysis, differential scanning calorimetry ; mechanical properties. Working on are in novel polymer matrices for battery membrane and also solar cell electrolytes.

**PUBLICATIONS**

**Journal papers**

1. R. Khalil et al., ” Effect of Vitrification Suppression on Non-linear Conduction in Vanadium Phosphate Glasses IL NUOVO CIMENTO, Vol. 20 D, No. 10 (1998)1581.
2. R. Khalil et al., “Effects of verification suppression on structure morphology, conductivity and dielectric properties of vanadium phosphate glasses” Journal of Physics and Chemistry of Solids 65 (2004) 881.
3. R. Khalil et al., ”Early stages of iron precipitation in silicon” Phys. Stat. Sol. (c) 2, (2005) 1802.
4. R. Khalil et al., ”Electrical Properties of Clustered and Precipitated Iron in Silicon” Solid State Phenomena Vols 108-109 (2005) 109.
5. R. Khalil et al., ”Electronic states at dislocations and metal silicide precipitates in crystalline silicon and their role in solar cell materials” Appl. Phys. A 96 (2009) 235.
6. R. Khalil et al., ”Structural and electrical properties of pure and H2SO4 doped (PVA)0.7(NaI)0.3 solid polymer electrolyte Ionics, 16(2010)269.
7. R. Khalil et al, “The role of TiO2 anatase nano-filler to enhance the physical and electrochemical properties of PVA-based polymer electrolyte for magnesium battery application” Journal of Materials Science and Engineering A 3 (10) (2013) 678-689
8. R. Khalil et al, “Synthesis and characterization of poly (vinyl alcohol)-acid salt polymer electrolytes” Mater. Express, Vol. 4, No. 6, 2014) 483-490.
9. R. Khalil and M. El-Bakry, " Artificial Neural Network Modeling for AC conductivity Behavior of PVA/acid salt Polymer Electrolyte " IJSER Volume 6, Issue 3, March 2015, 84-86.
10. R. Khalil et al, “Synthesis and characterization of NiCl2 crystalline nanowires for ZEBRA battery applications”. under Publish
11. R. Khalil et al, “Synthesis and characterization of ZnO/CdS nano composite for solar cell applications” under Publish

**Presentations/Manuscripts**

* “Early stages of iron precipitation in silicon” in ASIS workshop project.
* "10th International Conference on Extended Defects in Semiconductors "Chernogolovka, Russia, 11-17 September 2004.
* XIth GADST Conference Giens (France), 25-30, September 2005.
* ‎"3rd International Advances in Applied Physics & Materials Science Congress" on April 24 – ‎‎28, 2013 in Antalya, Turkey.‎

**RESEARCH EXPERIENCE**

***Doctoral Research:* “**Electrical Properties of Iron-Doped Silicon at Different Stages of

Precipitation”

***Master Research: “***Effect of Verification Suppression on Non-Linear Conduction in

Vanadium Phosphate Glasses”

***Supervision of the Theses*:**

1. **Ph.D.: student Name Rasha Sobhy**
2. **M. Sc.: student Name: Heeba Ibraheem Al-Desoquy**

**TEACHING EXPERIENCE**

1. Thermodynamic
2. General Physics I
3. General Physics II
4. General Physics III
5. Matter Properties and Heat
6. Geometrical Optics
7. Electronic Circuits I
8. Solid State
9. Semiconductor and Devices

**REFEREES**

* Prof. Dr W. Schroeter (4th Semiconductor institute, Uni. Goettingen), Germany.

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* Prof. Dr. Mabrouk Kamel Al-Mansy, Physics Department, Benha University, Egypt

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