**Mervat Gamal El-Shaarawy**

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Date of birth (dd/mm/yyyy): 11/11/1956

**Academic Record and Education:**

- **1993**:- Doctoral of philosophy in “Solid state physics”, Benha University, Egypt.

- **1978**:- B.Sc. of Science in Physics, Ain-Shams University.

**Scientific Career:**

* **2016:**Prof.Emeritus in “Solid state physics”, Faculty of Science, Benha University, Egypt
* **2011:** Head Department of Physics, Faculty of Science, Benha university, Egypt
* **2006**:- Professor in “Solid state physics”, Faculty of Science, Benha University, Egypt
* **2000**:- Associate Professor, Faculty of Science, Benha University, Egypt
* **1993**:- Lecturer in Physics dept., Faculty of Science,

Benha University, Egypt.

* **1985**:- Lecturer Assistant, Faculty of Science, Benha University, Egypt.
* **1981**:- Demonestrator**,** Faculty of Science, Benha University, Egypt.
* **1980:-** Demonstrator, Faculty of Science, Mansoura University, Egypt.

**Research interests:**

* Research Fields:- Physical properties studies on condensed and nano solid state materials and their applications in industry and different fields.

**Memberships:**

* Member in Egyptian Society for Materials Science.
* Active Member and founder for “Science and Technology Forum” (a scientific society).
* Member of the National Committee for Physics.

**Scientific activities and achievements:**

* Regular use of computer capabilities in computation and writing new small scientific modules. Plus its usage as a tool in teaching during classes to help in elaboration of scientific materials.
* The Supervision on a group of post graduate students in their Masters and PhDs works.
* The contribution in establishing and developing many specialized laboratories in Benha and Mansoura Universities.
* The participation in many scientific conferences at different universities and research institutes.
* High contribution in the establishment of new materials science program at faculty of Science, Benha Universisty.

**Cultural Activities**

* Contribution in establishing and developing a Science club in faculty of Science, Benha University.
* Supervisor on “Art Committee” in faculty of Science, Benha University for many successive years.
* Contribution and organization of many conferences, scientific seminars and discussion groups held in faculty of Science, Benha University.

**Trainings:**

* Participation in trainings and seminars of “Scientific quality assurance” held in Benha University. (Four Courses).

**List of Publications:**

Published (51) papers in various branches of physics field. The focus was concentrated on the preparation of glasses and nano materials as well as the study of their physical properties such as thermal, magnetic, electrical and radiation effects on the physical properties. The research is also concentrated on using the investigated materials in several technological applications in electronic and solar energy fields. Some studies were also performed on the mechanical and optical properties of inorganic and polymeric materials.

1-Crystallization Kinetics and Structure Transformations of

Ge Te Se Chalcogenide glass.

Arab Journal of Physics, 6 (1985) 69.

M.K. El-Mansy, M.I. El-Zaiki and M.G. El-Shaarawy

2- Conduction And Switching Phenomena In Ge Te Se Chalcognide

Glass.

Egyptian Journal of Solids, 8 (1986) 142.

M.K. El-Mansy, M.G. El-Shaarawy and M.I. El-Zaiki

3- Investigation on the Electrical Conduction of Ge Te Se

Chalcogenide Glass.

Arab Journal of Physics, (1987).

M.K. El-Mansy, M.G. El-Shaarawy and M.I. El-Zaiki

4- Effect of Composition, Thickness and Temperature on No

 Linear I-V Curves in Vanadium Phosphate Glasses.

 IL Nuovo Cimento, 18 D (8) (1996) 963.

M.K. El-Mansy, M.G. El-Shaarawy and A.A. Ammar

5- Effects of Alkali Metal Doping and -irradiation on the Crystallization Kinetics of the Glass Ag7I4VO4 .

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M.G. El-Shaarawv

6- Effect of Vitrification Suppression on Non-linear Conduction in Vanadium Phosphate Glasses.

IL Nuovo Cimento 20 D (10) (1998), 1581.

M.K. El-Mansy, N.M. Shash, M.G. El-Shaarawv, F.E. Salman and R.M. Bayoumi

7- Thermal and Electrical Studies on Mixed Crystals of

CuxZn1-x(HCOO)2.2H20.

Journal of Materials Science, 34 (1999), 1229.

M.G. El-Shaarawv and S.A. Shama

8- Magnetic Susceptibility and Dielectric Behavior of

(C12H14NH3)2FexCd1-xCl4.

Journal of Magnetism and Magnetic Materials, 208 (2000), 37.

 M.G. El-Shaarawv

9- Effect of Annealing and Replacement of Vanadium by Cr(III) and

Mn (IV) Ions in (V2O5)o.8-(P2O5)o.2 Glass on its Magnetic Susceptibility,

Electrical Conductivity and Dielectric Constant.

Journal of Applied Physics, 87(2) ( 2000), 668.

M.G. El-Shaarawv

10- Physical Studies on Vitreous Na2O-TiO2-P2O5 System.

Journal of the Physical Society of Japan, 69(5) (2000), 1423.

M.G. El-Shaarawy and F.A. Radwan

11- Thermal and Substituting of Transition Metal Ions (Cr3+ or

Mn4+) on Physical Properties of (V2O5)o.8-(P2O5)o.2 Glass.

 Materials Chemistry and Physics, 62 (2000), 1.

M.G. El-Shaarawv and T. El-Assawy

12- Magnetic and Dielectric Properties of (CHAn)2MCl4 and

(An)2MCl4 where M=Cu or Mn, CHAn=4-Cyclohexylanalinium and An=Analinium.

Journal of Magnetism and Magnetic Materials,217 (2000), 93.

 M.G. El-Shaarawv

13- Vitrification Suppression Effects on Structure Morphology,

Conductivity and Dielectric Properties of Vanadium Phosphate Glasses.

Journal of Physics and Chemistry of Solids, 65 (2004) 881.

N.M. Shash, F.E. Salman, A.Z. Mohamed, M.G.El-Shaarawy, R,M. Bayomi and M.K. El-Mansy

14- Physical Studies on Ternary Vanadium- Phosphate Glasses.

Journal of the Physical Society of Japan, 71(4) (2002) 1118.

M.G. El-Shaarawv

15- Physical Studies on Composites Ag7l4VO4-Al2O3.

Journal of Physics and Chemistry of Solids, 66 (2005) 1247.

 M.G. El-Shaarawv

16- Effect of γ- Radiation on Electrical Properties in Glasses of

AgI-Ag2O-V2O5-P2O5 System.

Journal of the Physical Society of Japan, 73(7) (2004) 2017.

M. G. El-Shaarawv and W. A. A. Bayoumy

17- Electrical Conduction in Bi2O3-B2O3 Glassy System.

Journal of Physics and Chemistry of Glasses, 43(5) (2002) 247.

M.G. El-Shaarawv and F.H. El-Batel

18- Doping Effect on The Electrical Properties of Amorphous A12O3.

Journal of Materials Chemistry and Physics, 78 (2002) 405.

M.G. El-Shaarawy and W.A.A. Bayoumy

19- Electrical Conduction and Dielectric Properties of Poly(methyl

methacrylate) / Perylene Solar Concentrators.

Journal of Applied Polymer Science, 88(3) (2003) 793.

A.F. Mansour, M.G. El-Shaarawv, S.M. El-Bashir, M K. El-Mansy and M. Hammam

20- Optical Study of Perylene Dye Doped Poly(methyl methacrylate) as Fluorescent Solar Collector.

Journal of Polymer International, 51 (2002) 393.

A.F. Mansour, M.G. El-Shaarawv, S.M. El-Bashir, M K. El Mansy and M. Hammam

21- A qualitative Study and Field Performance for a Fluorescent

Solar collector.

Journal of Polymer Testing, 21 (2002) 277.

A.F. Mansour, M.G. El-Shaarawv, S.M. El-Bashir, M.K. El-Mansy and M. Hammam

22- Bent Fluorescent Solar Concentrators (BFSCs): Spectroscopy,

Stability and Outdoor Performance.

Journal of Current Applied Physics ,7(2007)643.

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23- Electrical Conductivity and Dielectric Properties of

Cesium Sulfat Based Material.

Journal of Materials Chemistry and Physics 103(2007)65.

M.G. El-Shaarawv, H. Khoder, E. Sheha

24- Effect of γ-radiation on Mechanical and Electrical

Behavior of Polystyrene and CuO- polystyrene composite.

Arab Journal of Nuclear Science and Application, 40(3) (2007) 139.

M.G. El-Shaarawy,W.A.A. Bayoumy and M.A. El-Ahdal

25- Performance Evaluation of Thin-Film Concentrators for Green

House Applications.

 Journal of Desalination, 209 (2007) 249.

M.Hammam, M.K. El- Mansy, S.M. El-Bashir and M.G. El-Shaarawy

26-Detection of up-conversion in nano-structure BaTiO3 co-doped with Er+3 and Yb+3 ions

Journal of Sol-gel Science and Technology 53(3) (2010) 543

I.K.Battisha, Y.Bader, N.M.Shash, M.G.El-Shaarawy, A.G.Darwish

27- Thermal and mechanical properties of Sn-Zn-Bi lead-free solder alloys

Journal of Alloys and Compounds, 484(2009)134

A.A.El-Daly,Y.Swilem,M.H.Makled,M.G.El-Shaarawy, A.M.Abdraboh

28- Influence of the Nd3+ions on the FTIR and Visible Up-Conversion Luminescence Properties of Nano-Structure BaTiO3, Prepared by Sol-Gel Technique

Journal of Alloys and Compounds, 489(2010)451

A.G.Darwish, Y.Bader, M.G.El-Shaarawy, N.M.Shash,I.K.Battisha

29- Resistive Switching Characteristics of (V2O5)0.7(GeO2)0.3(CuO)x

Glasses

Journal of Material Chemistry and Physics, 120 (2010) 608

M.E.Gouda, H.Khodair, M.G.El-Shaarawy

30- Structural and electrical properties of pure and H2SO4 doped

(PVA)0.7(NaI)0.3 solid polymer electrolyte

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33- Measurement of Luminous Intensity Using Filtered Trap Detector

International Journal of Optics and Application, 2(4) (2012) 43

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34- Effect of Annealing Temperature on the Optical Properties of Nano-Structure CdS Embedded in Silica Gel Thin Film Prepared by Sol Gel Technique

Australian Journal of Basic & Applied Sciences, 6(13) (2012) 530

Ismail.M.M, Afify.H.H, El Shaarawy.M.G, Shash.N.M, Ashiry.A, Battisha.I.K

35- Effect of Thickness on Optical Properties of Thermally Evaporated SnS Films

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36- Preparation and Charactrization of Mg+-ion Conducting Composite Based on Poly(Vinyl Alcohol) With Various Concentrations Li2O

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M.M.Rashad,M.G.El-Shaarawy,N.M.Shash, M.H.Maklad, F.A. Afifi

39- [Microstructural modifications and properties of SiC nanoparticles-reinforced Sn–3.0 Ag–0.5 Cu solder alloy](https://scholar.google.com.eg/citations?view_op=view_citation&hl=en&user=KidBGNsAAAAJ&sortby=pubdate&citation_for_view=KidBGNsAAAAJ:4TOpqqG69KYC)

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