Prof. Dr. Mustafa Kamal
Professor of Metal Physics.
Faculty of Science, Mansoura University

(1)Personal Data

Name	**Mustafa. Kamal Mohamed Kamal**
Nationality	**Egypt**
Date of Birth	**13/1/1942**

(2)Academic Appointments

- **Lecturer, Associate Professor, Professor of solid state, Metal Physics.**
- **Head of the Physics Department, Faculty of Science, Mansoura University (1992-1998).**

(3)Scientific Qualification

- **B.Sc. (1964) Ain Shams University Egypt**
  Physics & Chemistry

- **M.Sc. (1968) Ain Shams University Egypt**
  Physics "Some Applications in Electron Microscopy"

- **Docteur es Science en Physiques (1974)**
  "Preparation, Condition D'obtention et Proprietes Mechaniques D'alliages Eutectiques A Solidification Dirigee'
  Docteur D'Etat Es Science En Physique 1974 USTL, Montpellier – France

(4)Scientific Activities

- **My name is included in Who's Who in Science and Engineering [2005 – 2006- 2007 -2009 -2010\2011\2012] Marquis Who's Who in America.**
- **Co-Scientific Coordinators [High Graduate Studies] Aleppo University Faculty of Science Physics Department "SYRIA" Metal Physics [1996 – Till Now]**

- **Committeeman "National Committee of Pure and Applied Physics[2001 – Till Now] Academy of Science and Technology Egypt**
- **Committeeman " Scientific Committee of Promotion to the degree Professors & Associate Professors"[1992-Till Now] Supreme Council of Egyptian Universities**
- **Committeeman "Supreme Committee for the Activities of the youth Weak of the Arabian Universities" [President of the Mansoura University] Supreme Council of the Egyptian Universities [2005-2006] Committeeman "Establishment Project of the Institute Studies of Mechanics & Space Science " [2005 - 2006]**
- **Editor – In – Chief International Journal of Materials Science Research India Publications http://www.ripublication.com/ijoms.htm**

- **Editorial Member Of International Journal of Pure and Applied Physics Research India Publications**
- **Member International Union of Applied and Pure Physics "C5 Low temperature Physics"2008- Till now**
- **Invited as a Member of the scientific committee of magazine of the Heat Treatment and Surface Engineering Association of Romania under the patronage of the Academy of Technical Sciences of Romania- Material Sciences and Engineering Section.**
- **Associate Member of International Theoretical of Physics, Trieste – Italy from 1986-1992.**
- **Invited to join as an Advisory Board of the 26th International Conference on Low temperature Physics LT-26 will be held in Beijing, China during August 2011 under supervision of IUPAP.**

(5) Research Interests

- **Solid State Physics and Metal Physics.**
- **Elastic properties of Metallic Alloys .**
- **Hardness and microstructural Characteristics of**
- **rapidly solidified metallic alloys**
- **Properties and Characterization of bearing & fusible solders alloys**
- **Properties and characterization of new lead - free solder alloys**
- **Electrical, thermal properties and Fermi parameters of metallic alloys**
- **Physical Study on low Melting alloys as a Shielding**

Blocks for Megavoltage Therapy Machines

- **Properties of Bio and Dental Alloys**
- **Rapid Solidification Technology**
- **Shape Memory alloys and superconductors materials**

Synthesis, fabrication, diagnostic and assessment of innovative sol gel derived photonic

systems "Science and Technology of Sol Gel Technique"

(6)Number of PhD and M.Sc Supervised by Prof. Dr. Mustafa Kamal. Fifty (50) Theses.

- **[50] PhD and M.Sc in (Solid State Physics "Metal Physics"," Biomedical Physics "And Dental Materials") Have been deserved From Egyptian Universities [Mansoura – Tanta-El-Monofiya –El Zagazig-Alexandria-Cairo And Aleppo University (SYRIA)**

As a Reviewer and as Evaluator for submitted Research, Scientific papers, Scientific Proposal" Projects ", M.Sc and Ph.D. Thesis from different Egyptians Universities , Academy of Science and Technology of Egypt "Science and Technology Development Fund STDF", Arabian universities, Arab Science and Technology Foundation "ASTF", and from Europe, India ,Syria and United State America, The University of the South Pacific, and Maejo University – Nongharm , Sansaie Thailand.

(7)Prizes

1-Golden Medal [1993] the best scientific paper "A Contribution to the study of IOL with X – Ray Diffraction Technique" Egyptian Society of Ocular Implants & Refractive Surgery"
2-Scientific Coordinator & Responsible Of Scientific Club of Mansoura University
[1994 –2007]
3-Certificate of Recognition
El- Monifia University [2000] scientific activities of the scientific clubs of Egyptian Universities.
4-Certificate of Recognition [from the President of El- Menia University]
El-Menia University [2001] Scientific Activities of the Fifth Weak Youth of the Egyptian Universities
5-Certificate of Recognition [From The Vice President of Assiut University]
Assiut University [2003] Scientific Activities of the sixth Weak Youth of the Egyptian Universities Certificate of Recognition [From The Vice President of Mansoura University] Mansoura University [2003] Distinguish participation in the activities of the Sixth Weak Youth of the Egyptian Universities
6-Certificate of Recognition [From the President of Mansoura University]
Mansoura University [2005] Scientific Activities of the Seventh Weak Youth of the Egyptian Universities
7-Certificate of Recognition [From the Vice President of Mansoura University]
Mansoura University [2005] Scientific activities of the Seventh Weak Youth of the Egyptian Universities

8-Scientific Coordinator of the Scientific Committee of the development of the Physics Books of the Secondary Schools [December 2004- Till now]
Ministry of Education of Egypt
9-Legion of Science and Arts First Class from the President Anwar El-sadat President of State (Egypt) 1979.
10-Amin Lotfy Prizes in Physics 1978 for the pioneering research in Metal Physics [Scientific Research and Technology Academy in Egypt].

11-A Golden Medal for the best scientific paper 1993 "A Contribution to the Study of IOL with X-ray diffraction technique" from "Egyptian Society of Ocular Implants & Refractive Surgery"

12-University Honorary Award "Basic Sciences" 2005\2006

13-The Best Researcher Award "METAL PHYSICS" Mansoura University 2006.

14-Honorary Doctorate in Physics from Yorker International University United State America (USA) 2007

15-Scientific Ceremony held July 5th, 2009 in Mansoura University

(8)Scientific Publications

From 1969 - 1980

1– "Some studies of the Egyptian chrysotile asbestos" A.A.Mohamed .Mustafa Kamal Baumaschinen + Baustoff Report III / 1969 pages 5 – 8

2-Electron microscope studies of asbestos in Egypt with a case report of asbestosis" A.H.Eid, A.Z. El.Sewefy and M. Kamal .The Journal of the Egyptian Medical Association, Vol.52, No. 4, 1969 pages 298 – 305

3– Mise en evidence par microscopie electronique du phenomene de polygonisation dans les monocristaux orientes d'aluminium (99,995%) obtenus par la methode de Fujiwara" J. Bagnol, E. Berger, M. Kamal, J. C. Pieri U. A. R. J. Phys., 2, No. 2 205 – 215 (1971)

4- "Preparation and mechanical properties of Aluminium Silicon composites" M. Kamal and R. Jouty Recent Advances in Science and Technology of Materials, V 2 Pages 261 – 266 "Plenum press . New York and London (1973 - 1974) □

5– "Some studies on thin metallic films of lead – antimony eutectic alloys. Kamal and M. Abd-Rabbo .The Bulletin of the Faculty of Science No. 5 Mansoura University, 1977 Pages 219 – 223

6– "Analyze des Phenomena de Propagation et de stockage de l'energie solaire en architecture" J.C. Pieri and M. Kamal Egypt. J. Phys. 9, No. 2, 69 – 79 (1978)

7– "Quantitative and qualitative studies on lead – base alloys "M. Kamal and M. Abd-Rabbo Proceedings of the Mathematical and Physical Society of Egypt, No. 47, January 1979 pages 125 -134

8–"Use of scanning electron microscopy to investigate lead – Antimony eutectic system" M. Kamal and M.Abd- Rabbo. The Bulletin of the Faculty of Science No. 7 Mansoura University 1979 Pages174 – 182

9–" Ageing of Aluminum – o.2 at % Chromium Alloy " M. Kamal and G. Atia The Bulletin of the Faculty of Science No.7 Mansoura University 1979 Pages 387 – 398

10–" Structural transformation and mechanical properties of an Aluminium – Zinc alloy"
N. A. Rasik , M. Kamal , S. A. Maksoud The Bulletin of the Faculty of Science No 7 Mansoura University 1979 Pages 237 -248

11–"Metals cutting at very low speeds "C. Regord and M. Kamal .Egypt. J. Phys., 10, No. 2 pp. 135 – 143 (1979)

- **"Le compose' intermetallique Sb – Sn dans les alliages Sn – 10, 4 % Sb contenant diverses additions" M. Kamal, J. C. Pieri, R. Jouty Annales de Chemie Science des Materiaux. Fr., 1979, 4, pp. 305 – 311**

12–"Electron microscopic examination of splat foils of Sn – Sb – Ag alloy "M. Kamal and J. C. Pieri Journal of Materials Science 15 (1980) Letters pp.525- 527 "Chapman and Hall Ltd "

13–" Hardness and microstructure of Pb – Sb – Sn ternary alloys" M. Kamal and M. Abd- Rabbo Proceedings of the Mathematical and Physical Society of Egypt, No. 49, January 1980 pp. 115-120

14" Structural Changes and permeability of root canal dentine exposed to weak acids & antiseptic" M. Kamal , Salsabyl M.M.Ibrahim and Salma El- Ashry Proceedings of First Symposium of Crystallography Cairo 11 – 12 Oct. 1980 pp.26 -42 { organized by National Committee of Crystallography } A.R.E. Academy of Scientific Research and Technology Egypt

15 " Effect of Heat treatment of the structure and mechanical properties of the amorphous alloy Fe 32 Ni 36 Cr 14 P 12 B 6 " N. K. Gobran , M. Kamal and S. Saleh Egyptian , J . Solids, Vol. 1, No. 1 (1980) pp. 264 – 270

From 1981 - 1986

16– "Crystallization and mechanical properties of some Fe – Ni base metallic glass" M. Kamal and M. Ishra Revue Phys. Appl 16 (1981) 491 – 495 France

17–"Stabilité des structures amorphes metalliques" J.F. Sadoc, M. Kamal et M. Laridjani Rapport D' activité du Laboratoire Associé au C.N.R.S. L.A.no 2 Université de Paris – Sud Centre d'Orsay Juin 1980 – Juin 1981(F-3)

18– "Investigation of the structure and mechanical properties of die steel for glass casting " M. Adel – Salam & M. Kamal .Bulletin of TIMS , No 39 , Jan. 1981 pp. 63 – 69 [Egypt]

19–"Effect of preliminary heat – treatment and cold work on the properties of ultra-high-strength steel with 5% Cr "A. Abdel- Salam, M. Kamal and J. C. Pieri Bulletin of TIMS, No. 43, Jan. 1982 pp. 36 – 49 [Egypt]

20–"Preparation et etude de l'evolution structurale des alliages metallique amorphes Pb- Sb "M. Kamal, J.C. Pieri, R. Jouty -Memoires ET etudes Scientifiques Revue de Métallurgie – Mars 1983 pp. 143 – 148 [France]

21–"Vacancy drag during electromigration of polygonization subgrain boundaries in Aluminium "E. Berger, J. C. Pieri and M. Kamal Egypt. J. Phys., 14, No. 1, pp. 79 -91 (1983)

22– "Structure and Properties of Metglass 2826 A (Fe32 Ni36 Cr14 P12 B6) M. Kamal and M. Ishra Egypt. J, Phys. 15, No. 2, pp. 247 – 256 (1984)

23"Modification in tin – antimony alloys "M. Kamal, A. Abdel – Salam and J. C. Pieri Journal of Materials Science 19 (1984) 3880 – 3886 [Chapman and Hall Ltd.]

24" Structure, Thermal properties and Hardness of Ti50 Be40 Zr10 glass"- M. Kamal and J. C. Pieri Egypt. J. Phys. 16, No. 1, pp. 109 – 116 (1985)

25"Structure and Crystallization kinetics of some Fe – Ni metallic glasses" M. Kamal and M. Ishra Egyptian J. Solids, Vol. 7, No. 2, (1985) pp. 18 – 28

[C] From [1987 – 1990]

26–"Effect of isothermal annealing on the structure of an amorphous Pd- Si alloy" J. F. Sadoc, M. Kamal and M. L. Laridjani First Regional Symposium on Materials Science in the Arab States [Structure Property Relationship in Solids] Vol. 1: First Arab Symposium on Materials Science, Alexandria 1987, pages 43 – 49

27-"A Contribution to the study of pterygium with X – ray diffraction technique "Mokbel, Th.H. Kamal M.; El-Dessouky, M.; El- Said, E. and Hassan, A.M. Mansoura Medical Journal, Vol. 17, No. 1 Jan. 1987 pp.23 -30 □

28–" Thermal and mechanical properties of metal glass Ti50Be40Zr10" Mustafa Kamal Research workshop in Condensed Matter 22 June – 4 September 1987 Working Group Seminars ICTP Trieste Italy

29–"On physics in the developing countries "Mustafa Kamal. Third Scientific Conference "Role of Physics in Development" 22 – 24 November, 1988 Arab Republic of Egypt Academy of Scientific Research and Technology National Committee of Pure and Applied Physics

30–" The Physics of low carbon, chromium, nickel, molybdenum steel machining" Mustafa Kamal , Atef Helal, Alaa Elhakim , incolaboration with, G. Beck And G. Metauer Third international Conf. on Fundamentals of Fracture " dedicated to the late Mike Ohr [F.R. Germany] Irsee, June 19 – 24th,[1989] Poster show of the session " Continuum Mechanical Modeling of Crack Ti"

From [1991 - 1999]

31–"Observation of the early stages of tool edge determination during verneer cutting" J. C. Pieri , C. Regord , B. Thibaut and M. Kamal Arab J. Appl. Phys. & Ed. 2 . 51 (1991) pp.51 – 60

32–"The influence of mechanical properties on the machinabilty of low alloy case hardening steel" Mustafa Kamal Research Workshop in Condensed Matter 17 June – 27 September 1991 ICTP Trieste Italy

33–"Mechanical properties of Pb-Sb metallic alloys" Mustafa Kamal Research Workshop in Condensed Matter 17 June -27 September 1991 I.C.T.P. Trieste Italy

34–"The various concepts of physics in life – science application" Mustafa Kamal Third Arab Conference on Physics Teaching the Arab Network on Physics Education Assiut University 12-17 January 1992 □

35–∀Microstructure and mechanical properties of rapidly solidified Pb –Sb metallic alloys" M.Kamal, M.Radwan, M. El-Kady, A. M. Daoud and J. C. Pieri Vol. I I I / 203 Proceedings of the Third Arab International Conference on Materials Science "Degradation and Stabilization of Materials", [1992] Alexandria Egypt.

36–" Structure changes and mechanical properties of rapidly solidified Fe85 B15 melt spun alloy" M.Kamal , M.M. El – Tonsy, I, M. Fouda , M. Radiant and H. Hosny The Bulletin of the Faculty of Science Mansoura University Vol.20 (2) pp. 1 – 18 (1993)

37–"Research subject and science education system in Egypt" Mustafa Kamal Colloquium- Physics Department - University of Maine USA Dec.1993 Friday, 10 December [1993] □

•38-"Determination of structure – property of rapidly quenched Aluminium-based bearing alloys before and after gamma irradiation" M. Kamal , A.M. Shaban, M. El- Kady , and R. Shalaby Second International Conference on Engineering Mathematics and Physics (ICEMP – 94) Vol. 2 , pp. 107 – 121 (1994)

39–"Source and methods marine environment protection" Arab Maritime Transport Academy 1stArab Conference on Marine Environment Protection 5 – 7 Feb.[1994] pp.1 – 15 Alexandria Egypt □Mustafa Kamal

40–"Physics and music education" Mustafa Kamal Arab Network for Physics Teaching , Teaching physics for students not majoring in physics , St. Catherine, Sinai, Egypt, July 23 – 28, 1994 □Mustafa Kamal

41–"Effect of ionizing radiation on the elasticity and internal friction of tin- base Babbitt rapidly solidified alloys" AMSE Periodicals Modeling, Measurement& Control , C,Vol.54,No,2, [1996],pp.41-54 (issue planned for winter 1995 -96) □Mustafa Kamal

42–"On gamma-irradiation effects on the mechanical properties of rapidly solidified Al – Sn and Al – Sb melt – spun alloys" A.M. Shaban and M. Kamal .Radiation Effects and Defects in Solids, [1995], Vol. 133. Pp.5 -13 □

43–"Application of the X-ray crystallography to the science of metal physics" Mustafa Kamal "The Role of Crystallography in Technological Developments"5th National; Symposium on Crystallography 20 April, 1995 (Cairo) - .

44–"X-Ray diffraction study of intraocular lenses explanted from eyes with uveitis" Tharwat Mokbel and Mustafa Kamal Mohamed .Short Communication Middle East Journal of Ophthalmology Volume 3, Number 3, December [1995], pp.210 – 213 □

45– "Pseudophakic uveitis in children" Tharwat Hassanen Mokbel , Mustafa Kamal Mohamed Bull.,Ophthalmol, Soc. Egypt, [1995]; Vol. 88, Number 2, 271 - 275

46–"New approach for teaching physics for first year premedical students(Non-majoring Physics)" Mustafa Kamal Abstracts of the Workshop on "New Methodologies and Technologies in Teaching Science" 3 – 6 March 1996 P.[25], UNESCO ; Minister of Higher Education & Scientific Research Chancellor of the UAR

47–"Wetting and spreading of individual latex Particles" Unertl W. N. , Y. Luo , D. Woodland, A.B. El-Bediwi, M. Kamal, and A. El-Farash Annual Adhesion Society Meeting (Adhesion Society, Blacksburg, VA 1996)pp.335 – 337

47– "Diffraction and Metal Physics: Present and Future" Mustafa Kamal the Sixth One Day Seminar on: Crystallography and Recent Developments in Science and Technology 26th December, 1996, Helwan University, Cairo, Egypt Lecture (9)

48–"Rapidly solidified of Sn – Sb – Ag ternary bearing alloys" M. Kamal , A.M.Shaban,M.El-Kady,A.M.Daoud,and R.Alarashi U. Scientist Phyl, Sciences Vol. 8, No. 2, 166 – 172 (1996) □

49–"Irradiation, mechanical and structural behavior of Al-Zn-Based alloys rapidly quenched from melt" M. Kamal, A.M.Shaban. M.El-Kady and R. Shalaby Radiation Effects and Defects in Solids, 1996, Vol. 138, pp. 307 – 318

50-"Climatic conditions along the Mediterranean coast of Egypt" Abdel Aziz Abdel baeth Hamed and Mustafa Kamal The Fifth National Conference on Environmental Studies and Research, Cairo, Egypt – Dec. 1996, Vol. 1 : 1 - 7 .

51– "The arrival to an equilibrium migration from the village to the town by using Monte Carlo Method " Mahrous Mikhail and Mustafa Kamal The first Conference on the role of science in the development of Egyptian society and environment Zagazig University , Benha Branch Egypt, 21 -23 October, 1996 Mathematics OPME-6 Abstract Book.

52–" Postgraduate Medical Physics Teaching Program at the University of Mansoura" Mustafa Kamal .1st Symposium on Medical Physics Mansoura University, September 16, 1997, pp.1-11(92) □

53–"Thermal and ionizing radiation treatment of the rapidly solidified Al-Zn-Si melt spun alloys" A.M.Shaban, S.M.Hammad,A.M.Daoud and M.Kamal .Radiation Effects and Defects in Solids , Vol, 143, pp. 179 -191 (1997) □

54–"The structure and properties of rapidly quenched Bi –Pb – Sn – Cd fusible alloys" Mustafa Kamal. Mohamed Bashir Karman and Abu Bakr El-Bediwi U. Scientist Phyl. Sciences Vol. 9, No. 2, 164 -171 (1997) □

55– "Evaluation of electronic transport and premature failure in the melt-spun Pb –Sn – Sb -Ag rapidly solidified alloys R. Alarashi , A.M. Shaban , M. Kamal .Materials Letters 31 (1997) 61 -65 □

56– " Study of Pterygium with X-ray diffraction technique" Tharwat Hassanen Mokbel & Mustafa Kamal Mohamed Bull Ophthalmol Soc. EGYPT, 1997 ; Vol, 90, Number 3 , 419 - 423

57–"Structure, mechanical properties and electrical resistivity of rapidly solidified Pb – Sn – Cd and Pb-Bi-Sn-Cd alloys" Mustafa Kamal. Abu-Bakr El-Bediwi, Mohamed Bashir Karman Journal of Materials Science: Materials in Electronics 9 (1998) 425 -428 □

58– "Mechanical properties of Fe40Ni38Mo4B18 and Ni81Cr15B4 glassy metals after annealing" Mustafa Kamal and Abu-Bakr El-Bediwi AMSE Periodicals, Modeling Measurement & Control B , 1999 – Vol. 68, No.2 pp.27 -35 "The Development of Talent preparation and training and providing for his welfare" Mustafa Kamal [Invited] Mansoura University Faculty of Education ,Damietta Branch, Damietta 11- November 1999 Plenary Lecture pp. 21-32

59–"The Scientific Concept of the New materials" Mustafa Kamal. [Invited] Plenary Lecture Aleppo University –Physics Department Syria 18 – 9 – 1999

60– "Hardness indentation measurements for large-grained polycrystals of the trivalent metal Aluminium" Mustafa Kamal and Abu-Bakr El-Bediwi Radiation Effects & Defects in Solids, Vol. 147. pp. 211-224 (1999

From 2000 up to 2005

61- **Review of the physical of some electrical and mechanical properties of low melting point Bismuth – Lead alloys" Mustafa KamaL, M.A. Ewaida , M. A. Elleithy and T.A. Dawod, Mansoura Sci. Bull.(C Nat. Sci. and Phys.sci.) Vol. 27 (1), June, 2000 pp.1 – 24.**

62-Structure, mechanical metallurgy and electrical transport properties of rapidly solidified Pb50 Sn50-x Bi x alloys, Mustafa Kamal , Abu – Bakr El – Bediwi Journal of Materials Science : Materials in Electronics 11 (2000) 519 – 523

63-The effect of thermal heating on strength and hardness of Fe32Ni36Cr14P12B6 and Fe C3.8 glassy metals, Abu-Barky El-Bediwi, Mustafa Radwan , Mohamed Bashir Karman and Mustafa Kamal A.M.S.E Modeling, Measurement & Control Vol. 74, No.7 Modeling A. 2001 pp. □15 – 22

64-Effect of ternary addition on characteristics of Pb – Sn base alloys, M.M. El-Sayed, F. Abd El- Salam, R.H. Nada, and Mustafa Kamal Egypt. J. Sol., Vol. (24), No. (2), (2001) pp. 161 - □170

65-Thermal, Mechanical and Electro transport properties of irradiated rapidly solidified Pb – Sn – Zn alloy, A.M.Shaban, M. KAMAL, R.H.Nada, M.M.El-Sayed and F.Abd-El-Salam Egypt. J. Sol., Vol. (25), No. (2), (2002).

66-Structure, Mechanical and Electrical Transport Properties of low-melting half bearing metal alloys rapidly solidified from melt, Mustafa KAMAL, Said Mazen, Abu-Bakr El-Bediwi and Mohammed El- Naggar Radiation Effects & Defects in Solids, 2002, Vol. 157,pp. 467-474.

67-Influence of copper additions on structural, physical and mechanical properties of 65wt%Sn, 25wt%Ag, 10wt%Sb rapidly solidified from melt, M.KAMAL, M. S. Mikhail, R.M.Shalaby AMSE Periodicals 2003 Modeling C, Vol. 64, no 3 pp. 1-20.

68– دراسة الخصائص البنيوية والكهربائية للخلائط الرباعية Bi- Pb- Cd- Sn المتصلبة بسرعة والميكانيكية R.J. of Aleppo University Basic Sciences No. 38 , 2003 Syria
محمد بشير كرمان – مصطفي كمال – أحمد عيسي – تيسير الزامل العدد رقم \38\2003 – سلسلة العلوم الأساسية – مجلة بحوث جامعة حلب- الصفحة من273-288– حلب سورية

69– تأثير إضافة البزموت علي الخصائص الميكانيكية للخلائط Sn – Zn المتصلبة بسرعة
أحمد عيسي – تيسير الزامل - مصطفي كمال
سلسلة العلوم الأساسية – مجلة بحوث جامعة حلب – – العدد رقم 39 \ صفحة – 225-241 \2003
R.J.of Aleppo University –Basic Sciences- No.39 2003 Syria سورية

70-Rapid Solidification Effects in Pb – Sb Eutectic Alloys, Mustafa Kamal and Rizk Mostafa Shalaby Journal of Materials Science and Technology Vol. 11 , 2003 , No. 4 pp. 58 – 69

71-Effect of Bi addition on some physical properties of rapidly solidified Sn – 10% Sb solder alloy, A.B.El-Bediwi, .S.Gouda, M.KAMAL Accepted for

publication in the AMSE Journals March 13 , 2003 Website :www.amse-modeling.org

المتصلبة بسرعة Sn – Zn – Bi للخلائط الخصائص الكهربية

72-
مصطفي كمال - أحمد عيسي - تيسير الزامل
العدد رقم 41 \ 2004 – سلسلة العلوم الأساسية - مجلة بحوث جامعة حلب- صفحة 25-40 – سورية..R.J.of Aleppo University 2004 No.41

73- الخواص البنيوية والكهربائية للخلائط المصلبة بسرعة Pb-Sn-Cu

مصطفي كمال - أحمد صبحي عيسي

Research Journal of Aleppo University Basic Science Series No.43 2004

74– Effect of copper addition on some properties of rapidly solidified lead – free Sn- 10 wt.% Zn alloys, M. Kamal , S.A. Mazen and M. G. El-Naggar Radiation Effects & Defects in Solids, May 2004 , Vol. 159 , pp. 335 – 344.

75– Characteristics of quenched Bi – Pb – Sn- Cd penta – alloys, M.KAMAL and A. B.El – Bediwi Published in the proceeding of 8th Arab International on Materials Science, Alex., Egypt,2004 , pp 161 -168.

76– X- Ray and Microhardness investigations of rapidly solidified Aluminium- Silicon eutectic alloys from molten state" M.KAMAL, R. M. Shalaby and A. S. Issa Published in the proceeding of 8th Arab International on Material Science. Alex. Egypt, 2004, pp.205 -214.

77– Effect of bismuth addition on structural , mechanical and thermal properties of rapidly solidified lead – free Sn – 10wt.% Zn alloys" M. KAMAL , S.A. Mazen and M. G. El- Naggar Published in the proceeding of 8th Arab International on Material Science. Alex. Egypt, 2004, pp. 215 – 224.

78– Structural, Thermal and Mechanical properties of rapidly solidified Sn – Sb – Cu-Al bearing alloys, M. Kamal, A.B.El-Bediwi and T.El-Ashram, Tratamente Termice Si Ingineria Suprafetelor (Heat Treatment and Surface Engineering)ROMANIA, Vol. IV , Nr. 1-2 \ 2004 pp.36 -50 .

79– The effect of rapid solidification on the structure, decomposition behavior, electrical and mechanical properties of the Sn – Cd binary alloys, M. Kamal, A.B.El-Bediwi and T.El-Ashram Journal of Materials Science : In Electronics , 15 (2004) 211 – 217.

80– Structural and Physical properties of rapidly solidified lead – bismuth eutectic alloy, M. Kamal, M. El- Tonsy, A. B. El-Bediwi and E. Kashita Phys. Stat. Sol.. (a) 201, No. 9, 2023 – 2034 (2004).

81– Correlation study of structural, electrical and mechanical properties of quenched Tin – Zinc – Cadmium solder alloys, A.B. El-Bediwi , M. M. El – Bahay and M. KAMAL Radiation Effects & Defects in Solids , August – September 2004 , Vol. 159 , pp. 491 – 496 .

82– A Study of Bi – Pb – Sn – Cd- Sb Penta Alloys Rapidly Quenched From Melt, Mustafa Kamal and Abu Bakr El – Bediwi Radiation Effects and Defects in Solids , Volume 159, Number 11 -12 \ November – December 2004 Pages : 651 – 657.

83– Structure, electrical, mechanical and wettability of quenched lead – free solder alloys, Mustafa Kamal , M.S.Meikhail , Abu Bakr El-Bediwi , El-Said Gouda Radiation Effects and Defects in Solids , Volume 160 , Number 1 – 2 / January – February 2005 Pages : 37 – 44.

84– Study of structural changes and properties for Sn – Zn9 lead – free solder alloy with addition of different alloying elements, Mustafa Kamal, M.S. Mikhail, and Abu Bakr El – Bediwi. El- Said Gouda Radiation Effects and Defects in Solids, Volume 160, Number 1-2 / January – February 2005 Pages: 45 – 52.

85– Structure and Properties of a Rapidly Solidified Pb97-xSn3Agx Alloys, Mustafa Kamal, Rizk Mostafa Shalaby and Mostafa M.ElSayed, Int.J. Pure & Appl. Phys. Vol. 1 (2005), pp. 33 – 43 © Research India Publications

86– Cultural Encyclopedia "[Environmental Consciousness], (2003) Mustafa Kamal No. Deposit 2002/18803 – ISBN – 977-5723-82-5 – Published & printed by Etrac for Publishing and Distributions. {BOOK}

87– Characterization of bismuth - tin - lead and bismuth - tin- lead-cadmium fusible alloys,

Mustafa Kamal Said Mazen, Abu-Bakr El-Bediwi and Eman Kashita. Radiation Effects and Defects in Solids, Volume 160 , Number 8, August 2005, Pages : 369-375.

88– Effect of Copper Additions on Structure and Properties for Sn-9Zn-1Bi Lead Free Solder" Mustafa Kamal, M.S. Meikhail, Abu Bakr El – Bediwi. El- Said Gouda. Tratamente Termice Si Ingineria Suprafetelor (Heat Treatment and Surface Engineering) ROMANIA, Vol. V , Nr. 1-2 \ 2005 pp.37 -94.

89– Structure, Attenuation Coefficients and Physical Properties of Bi-Pb-Sn Fusible Alloys, M.Kamal, B.M. Moharram, H. Farag, A. El-Bediwi and H.F Aboshelasha, Radiation Effects and Defects in Solids , Vol.161,No.2,February 2006, 137 – 142.

90– New lead-free solder alloy, MUSTAFA KAMAL, M. S. MEIKHAIL, ABU BAKR EL-BEDIWI and EL-SAID GOUDA, Radiation Effects & Defects in Solids, Vol. 160, No. 7, July 2005, 301–312.

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