

**PROF. WALID M. DAOUSH**

*Professor of Nanomaterials*

Helwan University, Cairo; Egypt

**Present Address;** College of Science

**Al Imam Muhammad Ibn Saud Islamic University,**

**P.O.Box: 90950, Riyadh 11623, Saudi Arabia**

**Phone office:** (00966) 0112595794

**Phone (Cell):** (00966) 0566724635

**Email:** [wmdaoush@imamu.edu.sa](mailto:wmdaoush@imamu.edu.sa)

**Email:** [waliddaoush@techedu.helwan.edu.eg](mailto:waliddaoush@techedu.helwan.edu.eg)

[http://www.helwan.edu.eg/english/?page\\_id=1145](http://www.helwan.edu.eg/english/?page_id=1145)

Research Gate: [https://www.researchgate.net/profile/Walid\\_Mohamed\\_Daoush](https://www.researchgate.net/profile/Walid_Mohamed_Daoush)

Scopus ID: <http://www.scopus.com/authid/detail.url?authorId=35609965600>

Google Scholar: <https://scholar.google.com/citations?hl=en&user=KXw-s0AAAAAJ>

**CITIZENSHIP:** Egypt

**GENDER:** Male

**DATE OF BIRTH:** Jun-9-1973

**MARTIAL STATE:** Married



**RESEARCH INTERESTS**

- Nanomaterials.
- Carbon Nanotubes.
- Powder Fabrications and consolidations.
- Composites (metal, ceramic, polymer matrix and lamellar composites).
- Biomaterials.
- Microstructure-physical, magnetic and mechanical properties relations in materials.

**EMPLOYMENT**

- September 2016-to date: Professor  
(College of Science)  
**Al Imam Muhammad Ibn Saud Islamic University,  
Riyadh; KSA**
- Dec 2015- to August 2016: **Professor** (Department Head May 2012-date)  
Department of Production Technology,  
Faculty of Industrial Education  
**Helwan University, Cairo; Egypt**

- Jun 2015- to Nov.2015: **Associate Professor** (Department Head)  
Department of Production Technology,  
Faculty of Industrial Education  
**Helwan University, Cairo; Egypt**
- Aug. 2014- to May 2015: **Visiting Associate Professor** (Fulbright Scholar)  
Department of Mechanical Engineering,  
**San Diego State University (SDSU)**  
San Diego, California, USA.
- April 2012- 2015: **Associate Professor** (Department Head May 2012-August 2015)  
Department of Production Technology,  
Faculty of Industrial Education  
**Helwan University, Cairo; Egypt**
- April. 2011-2012: **Post-Doctoral Fellow**  
Graduate Institute of Applied Science and Technology  
**National Taiwan University of Science and Technology (NTUST)**
- Dec. 2009- 2011: **Research Associate Professor** (Lab. Director - Oct. 2010)  
Powder Technology Division,  
**Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt**
- Dec. 2008- 2009: **Researcher**  
Powder Technology Division,  
**Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt.**
- Dec 2007- 2008: **Research Assistant Professor**  
Department of Materials Science and Engineering,  
**Korea Advanced Institute of Science and Technology (KAIST),  
Daejon; South Korea.**
- Jan 2007- Nov.2008: **Research Assistant Professor**  
Department of Materials Science and Engineering,  
**Korea Advanced Institute of Science and Technology (KAIST),  
Daejon; South Korea.**
- Dec. 2004- 2006: **Researcher**  
Powder Technology Division,  
**Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt.**
- Jan 2001- 2004: **Assistant Lecturer**  
Powder Technology Division,  
**Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt.**

July 1996- 2000: **Research Assistant**  
Powder Technology Division,  
**Central Metallurgical R&D Institute (CMRDI), Cairo, Egypt.**

## **EDUCATION**

- **D. Phil (2004)**, Faculty of Science, University of Ain Shams, Cairo; Egypt.  
**Thesis Title: Ni-Coated Powder Approach for Advanced Materials**
- **Master of Science (2001)**  
**Thesis Title: Preparation of Copper Base Friction Materials by Chemical Reduction Method**
- **Bachelor of Science (1994)**  
**Class of Degree: First Class Honors.**

## **TRAINING**

- “**Fine Ceramics Application**” at **Japan Fine Ceramics Center** in the period from 9/5 to 21/7/2000.
- “**Processing and Investigations of New Composite Materials**” at the **Institute of material Research of Slovak Academy of Science** in the period 1/3 to 28/4/2004.
- “**Design & Optimization of Laminated Composite Materials**”, 8-9 May 2007 in Kavaq Business Intelligence Co., Kuala Lumpur, Malaysia.

## **Languages and Computer Skills**

- English (Speaking and Writing)
- Japanese (Short Speaking)
- Korean (Short Speaking, Writing)
- Mother language Arabic
- ICDL

## **AWARDS & HONORS**

- 1- *Awarded the Price of **the Egyptian Academy of Science and Technology (Prof. Venice Gouda)** for Young researcher 2010 in advanced materials.*
- 2- *Selected candidate in the **Who's Who in the World** at 2011*  
*<http://www.marquiswhoswho.com/>*

## **TEACHING EXPERIENCE**

Teaching career span three institutions as follows;

- 1- Central Metallurgical R&D Institute
- 2- University of Helwan in Cairo; Egypt.
- 3- College of Science at Al Imam Muhammad Ibn Saud Islamic University in Riyadh; KSA.

The teaching experience included the followings;

## **Undergraduate Level**

- Introduction to Technology (an Introduction to Extractive Metallurgy).
- Solid State and Materials science
- Materials Properties and Testing.
- Metal Welding.
- Materials Joining.
- Metals Forming.
- Electrochemistry and Corrosion
- Nuclear and Radiation Chemistry
- Introduction to Chemical Engineering
- Industrial Chemistry
- Materials Science and Technology.
- Work Study.
- Safety in Industry.
- Tool and Die Design.
- Quality Control.
- Finishing Processes and Non-Traditional Machining.
- Planning and Managements in the Industry.

## **Graduate Level**

- Powder Technology and sintering (Training of Engineering).
- Work Study.
- Materials Technology ( Nanotechnology)
- Metal Forming Processes
- Welding Technology

## **UNDERGRADUATE RESEARCH PROJECTS:**

- More than 50 graduated Projects in the field of materials science and testing at Helwan University, Cairo; Egypt and at the college of science in the Al Imam Muhammad Ibn Saud Islamic University, Riyadh; KSA.

## **THESIS SUPERVISION:**

- Dr. Daoush has so far collaborated and co supervised for 15 PhD and Master's Candidates.

## **Graduated and defended Ph.D. Thesis**

- 1- **"Study of Some co-Precipitated Perovskite- Manganite Alloys"** by Eid K. Abdel-Khalek, Faculty of Science at Al Azhar University, Cairo Egypt **(2006)**.
- 2- **"Fabrication and Characterizations of silicon carbide reinforced aluminum matrix nanocomposites"** by Mohamed Hashish, Faculty of Engineering at Zagazig University, Zagazig Egypt **(2013)**.
- 3- **"Processing and development of New Tungsten Heavy Alloys Products"** by Mohamed A. Sayed, Faculty of Engineering at Helwan University, Cairo, Egypt **(2015)**.

- 4- **“ Preparation of (Ta, Nb)C/Ni Cermets Suitable for Cutting Tools”** by Hossam. M. Yehia, Faculty of Industrial Education at Suez University, Suez, Egypt **(2016)**.

#### **Graduated and defended MSc. Thesis**

- 1- **“Synthesis and Properties of Iron-Base Composite through Powder Metallurgy”** by El Sayed K. Maree Khalil, Faculty of Engineering at Al Azhar University **(2015)**.
- 2- **“Processing and Characterization of Boron Nitride/Nickel Copper Matrix Composite as Cutting Tool Materials”** by Ahmed A. El Tantawy, Faculty of Industrial Education at Suez University, Suez, Egypt **(2016)**.
- 3- **“Fabrication and Characterization of Fabrication and Characterization of Copper/Silicon Nitride Composites”** by Mahmoud A. Ahmed, Faculty of Industrial Education at Suez University, Suez, Egypt **(2016)**.
- 4- **“Preparation and Heat Flow Investigations of copper matrix composites as Electronic Component coolants”** by Ahmed H. Swedan, Faculty of Industrial Education at Suez University, Suez, Egypt **(2016)**.

#### **DEVELOPMENT OF POWDER TECHNOLOGY LABORATORY (CMRDI)**

The facilities include powder Fabrication facilities, water atomization, cold compaction, bench and industrial scale vacuum and N/H gas sintering furnaces. Mechanical alloying apparatus, powder rotator mixer, high accuracy digital balance, powder presses and dies, abrasive cutter, sieve analysis/shaker capabilities, high-temperature tube furnace, and microscopes with image analysis facility, materials polishing, grinding and specimen mounting capabilities facilities among others.

#### **PROFESSIONAL SERVICES & COMMITTEES**

##### **Membership**

- Member (reviewer) in the committee of the metallurgy, petroleum and mining at the Supreme Council of Universities-Egypt (2016-2019).
- Associate Editor of the journal of Materials Sciences and Applications 2016.
- Associate Editor of the journal of Nanomedicine Research 2016.
- Fulbright Alumni 2015.
- Member in the Materials Research Society since 2010.
- Member in the Chemical Engineering Division of the American Chemical Society since 2010.
- Member in the FP7 European commission experts 2009.
- Member at Korea Research Foundation 2008
- Member in the Egyptian Syndicate of Scientific Professions since 1994.

##### **Journal Reviewer for:**

- *Journal of Super lattices and Microstructures.*
- *Journal of Materials Research.*

- *Journal of Nanoparticles Research.*
- *Journal of Thin Solid Films.*
- *Scientific Research and Essays (SRE).*
- *Journal of Physical Chemistry.*
- *Journal of Powder Metallurgy.*
- *Journal of Nano Technology.*
- *Journal of Nano Technology*
- *Journal of Alloys and Compounds*
- *Engineering Science and Technology*
- *Advanced Powder Technology*

#### **Book Reviewer:**

- Book Reviewer for “Materials Processing: A Unified Approach to Processing of Metals, Ceramics and Polymers” by Prof. Lorraine F. Francis, Published by Academic Press Publications (2016).
- Book Reviewer for "Nanostructured Carbon Materials for Catalysis" by Prof. Philippe Serp and Bruno Machado, published by Royal Society of Chemistry (2015).
- Book Reviewer for "Nanostructural Bioceramics: Advances in Chemically Bonded Ceramics" by Prof. Leif Hermansson, published by Taylor and Francis (2015).
- Book Reviewer for "Bionanomaterials for Dental Applications" by Prof. Mieczyslaw Jurczyk, published by Taylor and Francis (2014).
- Book Reviewer for "Nanoscience and Nanotechnology in Engineering” by Prof. Vijay K. Varadan, A. Sivathanu Pillai, Debashish Mukherji, Mayank Dwivedi and Linfeng Chen, published by World Scientific (2010).

### **PUBLICATIONS**

#### **❖ PATENTS**

- 1-Licensed:** *Method for manufacturing high hardness coating powder with good high temperature stability and improved surface characteristics and strength:* KR 1492969 (priority date: Feb. 16, 2015) inventors Park, Hui Seop; Ryu, Min Ho; **Daoush, Walid M.**; Hong, Sun Hyeong
- 2-Licensed:** *High Hardness Coating Powder, And Preparation Method Thereof:* WO2010056077 (priority date: Nov. 14, 2008), inventors Park Hee Sub, Ryoo Min Ho, **Daoush Walid M.** and Hong Soon Hyung.
- <http://www.google.com.tr/patents/WO2010056077A9?cl=en&hl=tr>

## ❖ HANDBOOK

“Nickel Coated Powder Approach for Advanced Materials” Edited by Walid M. Daoush, Sayed F. Moustafa and Sayed T. Abd Elreheem, published by Lambert Academic Publisher.

<https://www.lap-publishing.com/catalog/details//store/gb/book/978-3-659-90142-3/nickel-coated-powder-approach-for-advanced-materials>

## ❖ BOOK CHAPTER

**Chapter on** Improvement of the Reinforcements Distribution in the Composite Matrices Using Powder Coating Process “in Handbook of High Performance Coatings for Automotive and Aerospace Industries, edited by Abdel Salam Hamdy Makhlouf, published by Nova Science Publisher, authors: **Walid M. Daoush**, Byung K. Lim, Hee S. Park, Sayed F. Moustafa, and Soon H. Hong, pp.301-324. [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=11740](https://www.novapublishers.com/catalog/product_info.php?products_id=11740).

### 3- **REFEREED JOURNAL PUBLICATIONS**(*students names underlined*)

*Dr. Daoush's publications have been so far cited more than 480 times, with an h-index of 10 and i-10 index of 10. (According to Google scholar Citation).*

**45- Mohamed A. Sayed**, Osama M. Dawood, Ayman H. EL Sayed, **Walid M. Daoush**, “Application of Taguchi Method in Optimization of Process Parameters of ODS WHAs” Advances in Materials Research, in press 2017.

**44- Walid M. Daoush**” Co-Precipitation and Magnetic Properties of Magnetite Nanoparticles for Potential Biomedical Applications”, Journal of Nanomedicin Research, Vol. 5(3) 118-123 (2017).

**43. Walid M.Daoush**, J. Yao, M. Shamma, K. Morsi “Ultra-rapid Processing of High-hardness Tungsten-Copper Nanocomposites”, Scripta Materialia, Vol. 113, 246-249 (2016).

**42. Walid M.Daoush**, Ayman Elsayed, Omayma El Kady, Mohamed Sayed, Osama M. Dawood “Enhancement of Physical and Mechanical Properties of Oxide Dispersion Strengthened Tungsten Heavy Alloys”, Metallurgical and Materials Transactions A, Vol.47, Issue 5, 2387-2395 (2016).

**41. Walid Daoush**, Ahmed Swidan, Gamal Abd El-Aziz, Mohamed Abdelhalim “Fabrication, Microstructure, Thermal and Electrical Properties of Copper Heat Sink Composites”, Materials Sciences and Applications, Vol 7, 542-561 (2016).

**40. Mahmoud A. Ahmed**, **Walid M. Daoush**, Ahmed E. El-Nikhaily” Fabrication and characterization of Copper/Silicon Nitride composites”, Advances in Materials Research, Vol. 5, No. 3, 131-140 (2016).

**39. K. Morsi, Walid M. Daoush** “Al-TiH<sub>2</sub> Composite ‘Particles’ as foaming Precursors for Metallic Foams”, Scripta Materialia, Vol. 105, 6-9 (2015).

38. H. M. Yehia, **Walid M. Daoush**, A. E. El-Nikhaily "Microstructure and Physical Properties of Blended and Coated (Ta, Nb)C/Ni Cermets", Powder Metallurgy Progress Vol.15, No.2, 262-271(2015).
37. **Walid M. Daoush**, Omayma A. El Kady , Amal. A. Abd Elgany, Mohamed A. Ghanem , Ahmed E. El-Nikhaily " Microstructure, Hardness and Magnetic Properties of (W:Ti)C-Ni Cemented Carbides" Journal of Japan Ceramic Society, in Press (2015).
36. Ayman Elsayed, Wei Li, Omayma A. El Kady, **Walid M. Daoush**, Eugene A. Olevsky, Randall M. German "Experimental Investigations on the Synthesis of W-Cu Nanocomposite through Spark Plasma Sintering", Journal of Alloys and Compounds, Vol. 639, 373-380 (2015).
35. **Walid M. Daoush**, Hee S. Park, Fawad Inam, Byung K. Lim, and Soon H. Hong "Microstructural and Mechanical Characterization of Ti-12Mo-6Zr Biomaterials Fabricated by Spark Plasma Sintering", Metallurgical And Materials Transactions A, Vol. 46A, No. 3, 1385-1393 (2015).
34. **Walid M. Daoush**, Toyoko Imae " Fabrication of PtNi Bimetallic Nanoparticles Supported on Multi-Walled Carbon Nanotubes", Journal of Experimental Nanoscience, Vol. 10, No. 5,392–406 (2015).
33. **Walid M. Daoush**, A. Francis, Y. Lin, R. German "An exploratory investigation on the in-situ synthesis of SiC/AlN/Al composites by spark plasma sintering", Journal of Alloys and Compounds, Vol. 622, 458-462 (2015).
32. **Walid M. Daoush**, Omayma Elkady "Microstructure, Physical Properties and Hardness of Al<sub>2</sub>O<sub>3</sub> Short Fibres/Ni Matrix Composites Fabricated by Powder Technology", Journal of Composite Materials, Vol. 48, No. 30, 3735-3746 (2014).
31. **Walid M. Daoush**, Hee S. Park, Soon H. Hong "Fabrication of TiN/cBN and TiC/Diamond coated particles by titanium deposition process", Trans. Nonferrous Met. Soc. China, Vol. 24, 3562–3570 (2014).
30. **Walid M. Daoush**, Byung K. Lim, Dong H. Nam and Soon H. Hong "Microstructure and mechanical properties of CNT/Ag nanocomposites fabricated by spark plasma sintering" Journal of Experimental Nanoscience, Vol. 9, No. 6, 588-596 (2014).
29. Fawad Inam, Badekai R Bhat, Thuc Vo, **Walid M. Daoush** "Structural health monitoring capabilities in ceramic - carbon nanocomposites" Ceramic International , Vol.40, No.2, 3793-3798 (2014).
28. **Walid M. Daoush**, Soon H. Hong "Synthesis of multi-walled carbon nanotube/silver nanocomposite powders by chemical reduction in aqueous solution", Journal of Experimental Nanoscience, Vol. 8, No. 5, 578–587 (2013).
27. Zeinab Abdel Hamid, Sayed F. Moustafa, **Walid M. Daoush**, Fatema Abdel Mouez, Mona Hassan "Fabrication and Characterization of Tungsten Heavy Alloys Using Chemical Reduction and Mechanical Alloying Methods", Open Journal of Applied Sciences, 3, 15-27(2013).
26. A.A. El-Daly, M. Abdelhameed, M. Hashish, **Walid M. Daoush** "Fabrication of silicon carbide reinforced aluminum matrix nanocomposites and characterization of its mechanical properties using non-destructive technique", Materials Science and Engineering: A 559, 384-393(2013).



25. **Walid M. Daoush**, Toyoko Imae "Syntheses and Characterizations of Multi-walled Carbon Nanotubes-Supported Palladium Nanocomposites", Journal of Materials Research, 27(13)1680-1687 (2012).
24. Sayed F. Moustafa, **Walid M. Daoush**, Ahmed Ibrahim, Erich Neubauer "Hot Forging and Hot Pressing of AlSi Powder Compared to Conventional Powder Metallurgy Route", Journal of Materials Sciences and Application, Vol. 2, 1127-1133 (2011).
23. **Walid M. Daoush** "Synthesis and Characterizations of Nanosized  $\text{Fe}_3\text{O}_4$  for Biomedical Applications", World Journal of Engineering Vol.2, 161-162 (2010).
22. Wei Li, **Walid M. Daoush**, Aditya Bothate, Z. Abdel-Hamid, Ridvan Yamanoglu, Eugene Olevsky, Sayed Moustafa, Randall M. German."Influence of Powder Preparation on Consolidation Behavior and Properties of Tungsten-Copper Alloys", Advances in Powder Metallurgy & Particulate Materials, Vol. 1, 245-257 (2010).
21. H.A.Sallam, W.M.El-Meligy, E.A.Mohamed, **Walid M. Daoush**, A.G.Moustafa "Utilization of the Hyperfine Structure of the Doped Iron Nuclei to Elucidate the Structural, Electric and Magnetic Properties of  $\text{La}_{1-x}\text{Ca}_x\text{Mn}_{0.95}\text{Fe}_{0.05}\text{O}_3$  Perovskite System", Arab Journal of Nuclear Science and Applications, Vol. 43, No 1, 138-150 (2010).
20. **Walid M. Daoush**, B.K.Lim, C.B.Mo, D.H.Nam, S. H. Hong "Electrical and Mechanical Properties of Carbon Nanotube Reinforced Copper Nanocomposites Fabricated by Electroless Deposition Process" Materials Science & Engineering A, Vol. 513-514, 247- 253 (2009).
19. **Walid M. Daoush**, Hee S. Park, Kyong H. Lee, Sayed F. Moustafa, Soon H. Hong " Effect of Binder Compositions on Microstructure, Hardness and Magnetic Properties of (Ta, Nb)C-Co and (Ta,Nb)C-Ni Cemented Carbides, Inter. J. of Ref. Met. and Hard Mat., Vol.27, 669-675 (2009).
18. **Walid M. Daoush**, Kyong H. Lee, Hee S. Park, **Soon H. Hong** "Effect of Liquid Phase Composition on the Microstructure and Properties of (W, Ti) C Cemented Carbide Cutting Tools "Inter. J. of Ref. Met. and Hard Mat., Vol. 27, No.1, 83-89 (2009).
17. **Walid M. Daoush**, Sayed F. Moustafa "Coated powders 'a good base' for intermetallics" Metal Powder Report, Vol 63, No 11, pp. 16 (2008).
16. A.G. Mostafa, E.K. Abdel-Khalek, **Walid M. Daoush**, M.Y.Hassaan "Structural, Magnetic and Electrical Transport Properties of the  $\text{La}_{0.70}\text{Sr}_{0.30}\text{Mn}_{0.9657}\text{Fe}_{0.0403+\delta}$  Perovskite" Journal of Hyperfine Interaction, vol. 184, pp. 167(2008).
15. **Walid M. Daoush** "Processing and Characterization of CNT/Cu Nanocomposites by Powder Technology" Journal of Powder Metallurgy and Metal Ceramics, Vol. 47, Nos. 9-10, pp 531(2008).
14. A.G. Mostafa, E.K. Abdel-Khalek, **Walid M. Daoush**, S.F. Moustfa, "Study of Some co-Precipitated Manganite Perovskite Samples Doped Iron" Journal of Magnetism and Magnetic Materials, Vol. 320, No.24, pp 3356 (2008).
13. S. H. Kaytbay and **Walid M. Daoush** "Phase Identification and Magnetic Properties of Nanocrystalline  $\text{Fe}_{50}\text{Cu}_{50}$ ", Journal of Powder Metallurgy Progress, Vol.7, No.2, pp. 111 (2007).
12. **Walid M. Daoush** and O.A. Elkady "Beating the force field with PM shield materials" Metal Powder Report, Vol 62, No 8, pp. 22(2007).

11. **Walid M. Daoush** "Synthesis and Consolidation of Nano-Sized NiCo Powder by Powder Technology Rout"; Mater. Sci .Forum, Vols., 561-565, pp. 1425 (2007).
10. **Walid M. Daoush**, Kyong H. Lee, Hee S. Park, Soon H. Hong "Effect of Metallic Binder Composition on Microstructure and Hardness of (W, Ti)C Cemented Carbides" J. of Korean Powder Metallurgy Institute, Vol.14, pp.208 (2007) (in Korean).
9. **Walid M. Daoush** "Processing of FeCo Nanosized Soft-Magnetic Material by Powder metallurgy Technique" Mater. Sci .Forum, Vols., 558-559, pp. 707 (2007).
8. **Walid M. Daoush**, and Sayed F. Moustafa "Coating points a way for synthesis of tough intermetallics", Metal Powder Report, Vol. 62, No. 1, pp. 30 (2007).
7. S.H. Kaytbay S.F. Moustafa and **Walid M. Daoush** "Solid-State Reaction in Al-Fe Binary System Induced by Mechanical Alloying" Journal of Defect and Diffusion, vol.272, pp. 15 (2007).
6. Sayed F. Moustafa, **Walid M. Daoush** "Synthesis of Nanosized Fe-Ni Powder by Chemical Process for Magnetic Applications," journal of Materials Processing Technology Vol. 181, pp.59 (2007).
5. S.H. Mansour, N.M.Ahmed and **Walid M.Daoush** "Studies on Magnetic Pigmented Polyester Composites", Polymer-Plastics Technology and Engineering, Vol. 46, pp. 85 (2007).
4. A. Francis, **Walid M. Daoush** "Synthesis and Magnetic Characteristics of Crystallized Ceramic in the BaO–NiO–TiO<sub>2</sub>–Fe<sub>2</sub>O<sub>3</sub> System," journal of Materials Processing Technology Vol. 181, pp. 213 (2007).
3. **Walid M. Daoush** and Sayed F. Moustafa "Processing of Metallic Filters by Powder Metallurgy Technique" Journal of Powder Metallurgy Progress, Vol. 6, No.4, pp. 164 (2006).
2. S.H. El-Sabbagh, N.M. Ahmed, **Walid M. Daoush** "Colored Rubber Vulcanizates with Some Magnetic Properties" Journal of Applied Polymer Science, Vol. 102, pp. 494 (2006).
1. Sayed F. Moustafa, **Walid.M. Rashad Daoush**, E.E. El- Shereafy "Cu/Matrix Composites Produced with either Coated or Uncoated Reinforcement Powders" Canadian Metallurgical Quaterly, Vol. 40, No., 4, pp. 533 (2001).

#### 4- REFEREED CONFERENCES PUBLICATIONS(*students names underlined*)

- 11- El Kady, O.A., **Daoush, W.M.**, Elsayed, A., Abdallah, M., Dawood, O.M. "Enhancement of physical and mechanical properties of oxide dispersion strengthened tungsten heavy alloys" *Euro PM 2014 Congress and Exhibition*.
- 10- H. M. Yehya, **W. M. Daoush**, M. H. El-Sayed, A. E. El-Nikhaily" Effect of Ni Binder Content on Microstructure, Hardness and Wear Properties of (Ta, Nb) C/Ni Cermets Fabricated by Powder Mixing and Coating Routs" *3rd International Conference in Africa and Asia on Welding and Failure Analysis of Engineering Materials*, 2-5 November, 2015, Luxor, Egypt.
- 9- Halfa Hossam, **Daoush Walid** "Preparation of 2-5 µm Magnetite Powder from High Carbon Ferrochrome (Fe-Cr) Alloy", *23<sup>rd</sup> International Conference on Metallurgy and Materials, METAL 2014, 21-23 May 2014, Brno, Czech Republic*.
- 8- **Walid. M. Daoush** "Recycling of Magnetic Materials and Cellulose Fibers from the Underground Metro Tickets" *The fourth international conference of Beni Suef University*,

18-19 Feb. (2014), Beni Suef University.

[http://gomhuriaonline.com/main\\_edu.asp?v\\_article\\_id=145645](http://gomhuriaonline.com/main_edu.asp?v_article_id=145645)

7- **Walid M. Daoush**, E. Gordo, P. Alvaredo, El Sayed K. Maree, Sayed F. Moustafa, Zeinab Abdel Hamid, Ahmed A. Atlam, Amir A. El Sayed "Microstructure and Hardness of Fe-TiCN Cermets Fabricated by Powder blending and Powder Coating Routes Followed by Powder Metallurgy Process" *The 2012 World Congress on Advances in Civil, Environmental, and Materials Research (ACEM'12)*, COEX, Seoul, South Korea,, 26-30 (August) (2012).

6- **Walid M. Daoush**, W. Bradbury, E. Olevsky, Randall M. German" Consolidation of  $\text{Si}_3\text{N}_4/\text{Cu}$  Composite powders Fabricated by Electroless Deposition Technique" 18th International Conference on Composites Materials, ICCM 2011; Jeju; South Korea; 21 - 26 August 2011, Code 96311.

5- Wei Li, Randall M. German, Aditya Bothate, **Walid M. Daoush**, Eugene A. Olevsky, Z. Abdel-Hamid, Sayed F. Moustafa "Barriers of W-Cu Alloy Consolidation by Spark Plasma Sintering" 8th International Conference on Tungsten, Refractory and Hardmaterials 2011; San Francisco, CA; United States; 18 - 21 May 2011, Code 98754.

4- Randall M. German, Aditya Bothate, Wei Li, Eugene A. Olevsky, **Walid M. Daoush**, Sayed F. Moustafa "Advances in W-Cu: New Powder Systems" 8th International Conference on Tungsten, Refractory and Hardmaterials 2011; San Francisco, CA; United States; 18 - 21 May 2011, Code 98754.

3- Randall M. German, Wei Li, **Walid M. Daoush**, Aditya Bothate, Z. Abdel-Hamid, Ridvan Yamanoglu, Eugene Olevsky, Sayed Moustafa" Powder fabrication role in the sintering and properties of tungsten-copper alloys" Proceedings of the World Powder Metallurgy Congress and Exhibition, World PM 2010.

2- **Walid M. Daoush** "Processing and Characterizations of CNT/Cu Sintered Materials" The 1<sup>st</sup> International Conference in Advanced Materials and Nanotechnology, NRC, Cairo, Egypt 3-5 Dec. (2007).

1- S. F. Moustafa, Z. Abdel-Hamid, S.S Abdel Rehim, **W.M. Rashad Daoush** "Processing of Ni/Al intermetallic and its composites using coating route" Powder Metallurgy World Congress & Exhibition, PM 2004, Vienna, Austria, 17-21 Oct. (2004).

#### **NATIONAL/INTERNATIONAL PRESENTATIONS:**

1. *2015 international conference of Powder Metallurgy and Particulate Materials, San Diego, California, USA, 17-20 May (2015).*
2. *The fourth international conference of Beni Suef University, Egypt, 18-19 Feb. (2014).*
3. **International Conference on Composite Materials (ICCM18)**, ICC, Jeju Korea, 21-26 Aug. (2011).
4. **International Conference on Materials Imperatives in the New Millennium [MINM2010]** Cairo, Egypt, 29 Nov.-2 Dec. 2010.
5. **First International Pharmaceutical Sciences Conference**, Tanta Univ., Egypt, Nov. 18-19, 2009.
6. **2008 Full conference of Korea Powder Metallurgy Institute**, Nov. 13-14, 2008.

7. **Spring Symposium of Korea Powder Metallurgy Institute, Chunbuck Univ., April 10-11, 2008.**
8. **The sixth Korea-Japan Joint Symposium on Composite Materials, 1-2Nov. (2007), POSTEC, Korea.**
9. **1st Workshop of the Advanced Materials & Applied Nanotechnology Group, AMANTG (26-27, Nov, 2006), NRC, Cairo, Egypt.**
10. **First Afro-Asian Conference on Advanced Materials Science and Technology (AMSAT06), Nov.13-16, 2006, Cairo, Egypt.**
11. **Powder Metallurgy Congress and Exhibition, (24-28 Sept. 2006) Busan, Korea.**
12. **The US-Egypt Workshop on Synthesis, Characterizations and Industrial Applications of Nanoparticles and Nanostructure Materials, at 12-15 Nov. 2005, Mubarak City, Alexandria, Egypt.**
13. **4th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano materials, at 17-20 Sept., 2005, Cairo., Egypt.**
14. **Us-Egypt Workshop on Advances in Science and Technology of Treatment and Utilization of Industrial Wastes, at Jun 6-10, 2004, Cairo Egypt.**

#### **FUNDING:**

- International project with Department of Materials Research at ARC Seibersdorf Research Center GmbH, Seibersdorf, Austria entitled **"Copper-Graphite Composite"** from 2001-2003 (**Role-Co PI**).
- US-Egypt international project with San Diego State University and NSF entitled **"Development of Nanosized W-Cu composites by Powder Technology Process"** from 2009-2012 (**Role-PI and Co PI from 2012 to 2016**).
- National Project with the Egyptian Science and Technology Development Foundation entitled **"Development of Tungsten Heavy Alloys for Replacing the Imported Products"** from 2009-2011 (**Role- Co PI**).
- International Project PCI Mediterraneo funded by AECID with Carlos III University entitled **"Development of a New Generation of Tool Materials Using Powder Metallurgy Processing"** from 2010-2012 (**Role PI**).

## **REFERENCES**

- **Prof. Soon H. Hong**

Department of Materials Science and Technology  
Korea Advanced Institute of Science and Technology, South Korea  
Email: shhong@kaist.ac.kr

- **Prof. Toyoko Imae**

Chair Professor at Nagoya University, Japan  
Email: imae@mail.ntust.edu.tw

- **Prof. Randall M. German**

Professor at San Diego State University, California; USA  
Email: rgerman@mail.sdsu.edu

- **Prof. Khaled B. Morsi**

Professor at San Diego State University, California; USA  
Email: kmorsi@mail.sdsu.edu

- **Prof. Elena Gordo**

Prof. at Faculty of Engineering, Carlos III University, Madrid, Spain  
Email: Elena.gordo@uc3m.es

- **Dr. Fawad Inam**
- Director of the Department of Mechanical Engineering at

Northumbria University, UK.  
Email: fawad.inam@northumbria.ac.uk.