CURRICULUM VITAE

PERSONAL INFORMATION:

Assoc. Prof. Dr. Tarek Said Kayed

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QUALIFICATIONS:

- **Post Doctorate Certificate (August 2010)**
  Subject: "Research Commercialization and Innovation"
  George Brown College, Toronto, Canada.
- **Ph. D. in Physics (December 2000)**
  Thesis: "Properties of the Tl- and Bi-based superconducting ceramics and tapes under magnetic field and gamma irradiation"
  Middle East Technical University, Ankara, Turkey.
- **M. S. in Physics (June 1996)**
  Thesis: "Experimental investigations of dichromated gelatin films and production of holographic optical elements"
  Middle East Technical University, Ankara, Turkey.
- **B. S. in Physics (May 1991)**
  Cairo University, Cairo, Egypt.

EMPLOYMENT HISTORY:

- **Associate Professor** in University of Dammam (Dammam, Saudi Arabia) from September 2010 to Current.
- **Associate Professor** in George Brown College (Toronto, Ontario, Canada) from January 2010 to August 2010.
- **Development Manager** in Gold Link Telecommunication Inc. (Mississauga, Ontario, Canada) from September 2007 to May 2009.
- **Associate Professor** in Atilim University (Ankara, Turkey) from October 2006 to June 2007.
- **Assistant Professor** in Atilim University (Ankara, Turkey) from January 2001 to September 2006.
- **Teaching Assistant** in Atilim University (Ankara, Turkey) from September 2000 to December 2000.
- **Teaching Assistant** in the Middle East Technical University (Ankara, Turkey) from January 2000 to December 2000.

RESEARCH:

- *"Study of Electromagnetic Properties of Novel Superconductors by Means of Gamma Irradiation"*, University of Dammam, Dammam, Saudi Arabia.
- *"Stand Alone Solar Powered System for Soil Remediation by Electro-Kinetic Techniques"*, Saudi Aramco, George Brown College, and University of Dammam, Dammam, Saudi Arabia.
- *"Fabrication of Holographic Optical Elements"*, Middle East Technical University, Ankara, Turkey.
- *"Production and Characterization of Superconducting Tapes and Wires"*, Middle East Technical University, Ankara, Turkey.
- *"Doping Effects on High Temperature Superconductors"*, Middle East Technical University, Ankara, Turkey.
- *"Effects of Gamma Irradiation on Superconducting Bulk and Tape Materials"*, Middle East Technical University, Ankara, Turkey.
- *"Investigating Electromagnetic Properties of Resistive Ceramic Materials"*, Atilim University, Ankara, Turkey.
- *"X-Ray Diffraction Characterisation of Semiconducting Thin Films"*, Atilim University, Ankara, Turkey.
- *"Radon Detection and Mitigation"*, George Brown College, Toronto, Canada.

COURSES:

- **Physics I-Mechanics** (first year-engineering).
- **Physics II-Electricity and Magnetism**(first year-engineering).
- **Materials Science** (second year-electric and electronics engineering).

RESEARCH INTERESTS:

- Electrical, Magnetic, Structural, and Thermal Properties of High T_c Superconductors, Semiconductors, and Ceramic Materials.
- Optics, LASER, and Solar Cells.
- Renewable Energy Sources.
- Research Commercialization and Innovation.

LIST OF PUBLICATIONS

A. BOOKS:

1. **Tarek Kayed**, Atef Qasrawi and Özlem Pehlivan.
   General physics laboratory manual.
   Atilim University Publications, Turkey (2001).
   ISBN number 975-6707-07-0.

2. **Tarek Kayed**

   Thallium and Bismuth based superconductors, an experimental study.

   VDM publishing, Germany, (2009).

   ISBN number 978-3-639-13832-0.

B. REFEREED PAPERS (in international scientific journals):

1. **Tarek S. Kayed**, F. Necati Ecevit, Ramazan Aydın.

   Derivation of dichromated gelatin holograms from AGFA 8E75HD plates and fabrication of holographic Fabry-Perot etalon.

   International Centre for Theoretical Physics, IC/96/132, (1996).

2. H. Özkan, U. Topal,N. Gasanly, B. Albiss, **T. Kayed**.

   Voltage-current characteristics of the thallium based ceramic superconductors.

   Supercond. Sci. Technol., Vol. 12, No. 9, pp 592-596, (1999).

3. H. Özkan, N. Gasanly, **T. Kayed**.

   Effect of magnetic field and γ irradiation on the electrical properties and structure of the Tl-based ceramic superconductors.

   Supercond. Sci. Technol., Vol. 13, No. 2, pp 161-164, (2000).

4. **T. S. Kayed**, H. Özkan, N. M. Gasanly, İ Ercan.

   Critical currents of Bi-2223 tapes near T_c under magnetic field and γ-irradiation.

   Supercond. Sci. Technol., Vol. 13, No. 12, pp 1625-1628, (2000).

5. **T. S. Kayed**, H. Özkan, N. M. Gasanly.

   Effect of lithium doping on the properties of Tl-based superconductors.

   Supercond. Sci. Technol., Vol. 14, No. 9, pp 738-740, (2001).

6. **T. S. Kayed**, I. Ercan.

   Effect of magnetic field and γ irradiation on the properties of Tl-2212 superconducting tape.

   Cryst. Res. Technol., Vol. 37, No. 8, pp 834-840, (2002).

7. **T. S. Kayed**.

   Properties of boron doped Tl-Ba-Ca-Cu-O superconductors.

   Mater. Res. Bull., Vol. 38, No. 3, pp 533-538, (2003).

8. **T. S. Kayed**.

   Synthesis, x-ray data, andHalleffectmeasurements of Li-dopedTl-Ba-Ca-Cu-O superconductor.

   Cryst. Res. Technol., Vol. 38, No. 11, pp 946-950, (2003).

9. **T. S. Kayed**, A. Mergen.

   Electricalproperties of $Bi_{1.5}ZnSb_{1.5}O_7$pyrochloreceramics.

   Cryst. Res. Technol., Vol. 38, No. 12, pp 1077-1081, (2003).

10.**T. S. Kayed**.

Magnetoresistance, voltage-currentcharacteristics, andHalleffectmeasurements of bulk MgB_2superconductors.

Cryst. Res. Technol., Vol. 39, No. 1, pp 50-55, (2004).

11. **T. S. Kayed**, I. Ercan.

Voltage-current characteristics of Bi-2223 superconducting tape near T_c under γ irradiation.

Cryst. Res. Technol., Vol. 39, No. 3, pp 255-258, (2004).

12. A. Mergen, **T. S. Kayed**.

Electricalbehaviour of $Pb_{1.83}Mg_{0.29}Nb_{1.71}O_{6.39}$pyrochloreceramics.

Mater. Lett., Vol. 58, No. 11, pp 1692-1695, (2004).

13. A. Mergen, **T. S. Kayed**, M. Bilen, A.F. Qasrawi, M. Gürü.

Production of anorthitefrom kaolinite and CaCO3 viacolemanite.

Key Eng. Mater., Vols. 264-268, pp 1475-1478, (2004).

14. A. F. Qasrawi, **T. S. Kayed**, İ. Ercan.

Fabrication and some physical properties of $AgIn_5S_8$ thin films.

Mat. Sci. Eng. B-Solid, Vol. 113, No. 1, pp 73-78, (2004).

15. **T S Kayed**, N Calınlı, E Aksu, H Koralay, A Günen, İ Ercan, S Aktürk, Ş Çavdar.

Microstructural, thermal, and electrical properties of $Bi_{1.7}V_{0.3}Sr_2Ca_2Cu_3O_x$ glass-ceramic superconductor.

Cryst. Res. Technol., Vol. 39, No. 12, pp 1063-1069, (2004).

16. A. F. Qasrawi, **T. S. Kayed**, A. Mergen, M. Gürü.

Synthesis and characterisation of $Mg_2B_2O_5$

Mater. Res. Bull., Vol. 40, No. 4, pp 583-589, (2005).

17. **T. S. Kayed**, A. F. Qasrawi.

Temperature and magnetic field effects on the carrier density and Hall mobility of boron-doped Tl-Ba-Ca-Cu-O superconductor.

J. Alloy. Compd., Vol 402, No. 1-2, pp 5-11, (2005).

18. A. F. Qasrawi, **T. S. Kayed**, Ismail Ercan.

Photoconductivity kinetics in $AgIn_5S_8$ thin films.

J. Alloy. Compd., Vol 508, pp 380-383, (2010).

19. A. F. Qasrawi, **T. S. Kayed**, Filiz Ercan.

Heat treatment effects on the structural and electrical properties of thermally deposited $AgIn_5S_8$ thin films.

Solid State Communications, Vol 151, pp 615-618, (2011).

C. ABSTRACTS (in conferences):

1.U. Topal, **T. Kayed**, H. Özkan, N. Gasanly.

$Tl_2Ba_2Ca_2Cu_3O_{10}$süperiletkenlerinin elektriksel ve yapısal özeliklerinin gama radyasyonu ile değişimi.

Bildiri, Yoğun Madde Fiziği Seminerleri–VI, Ankara, November 1997, P 1.

2. U.Topal, **T. Kayed**, N.M. Gasanly**,** H. Özkan**.**

Effect of magnetic field and temperature on the voltage-current characteristics of polycrystalline $Tl_2Ba_2Ca_2Cu_3O_{10}$ superconductor.

Abstracts, 9th International Conference on Modern Materials and Technologies, Florence, Italy (1998), No. P09.

3.U.Topal, **T. Kayed**, H. Özkan,N.M. Gasanly.

Effect of gamma irradiation on structure and electrical properties of $Tl_2Ba_2Ca_2Cu_3O_{10}$ superconductor.

Abstracts, 9th International Conference on Modern Materials and Technologies, Florence, Italy (1998), No. L19.

4. H. Özkan, U. Topal,N. Gasanly, **T. Kayed**, B. Albiss, İ. Ercan.

Effect of magnetic field and gamma irradiation on voltage-current characteristics of the thallium based ceramic superconductors.

Extended 2 Page Summaries, The 9th International Workshop on Critical Currents, Madison, Wisconsin, USA (1999), pp 192-193.

5. **Tarek Kayed**, Ramazan Aydın.

Fabry-Perot etalon fabrication using dichromated gelatin holograms.

Abstracts, Colloqium Spectropicum International XXXI, Ankara, Turkey (1999), p 461.

6. **Tarek Kayed**, HusnuÖzkan, İsmail Ercan, NizamiGasanly.

Properties of the Bi-based tapes near critical temperature under magnetic field and gamma irradiation.

Abstracts, Applied Superconductivity Conference, Virginia Beach, Virginia, USA (2000), No. 3MD06.

7. **T. S. Kayed**, H. Özkan, N. M. Gasanly.

Effect of lithium doping on the properties of Tl-based superconductors.

Three Page Article, The 10th International Workshop on Critical Currents, Göttingen, Germany (2001), pp 351-353.

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