Mahmoud El Korek

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Work Experience 9/1979−up till now: - Concordia University, Canada.
- American University of Beirut, Beirut, Lebanon.
- Lebaneses University, Lebanon
- Beirut Arab University, Beirut, Lebanon.

Professor: Teaching and Research

Education: 5/1979 University of Claude Bernard, Lyon, France

Diplome de Doctorat
Doctor of Philosophy

Additional Information

CURRICULUM VITAE

PERSONAL :

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Nationality : Canadian, Lebanese

Marital Status : Married

EDUCATION :

Ph.D. December 1988
Claude Bernard University, Lyon, France
Department of Physics

Title:"Formulation Explicit de l'Effet de Rotation dans la fonction d'onde de Vibration-Rotation d'une Molecule Diatomique : les Fonctions Harmoniques de rotation."

Dipome de Doctorat
May 1978
Claude Bernard University, Lyon, France
Department of Physics

Title:"Contribution a l'Etude des potentiels des Differents Etats Electroniques de la Molecule CO".

D.E.A June 1975
Centre of studies and Research in Mathematics and Physics, Beirut, Lebanon
(affiliated to the Claude Bernard University, Lyon, France)

B.Sc. June 1974
Lebanese University, Beirut, Lebanon

P.C. October 1968
Centre of Studies and Research
Mathematics and Physics,

Beirut, Lebanon

RESEARCH AWARD

1990 The Research Award in Natural Sciences
from the American University of Beirut,

PROFESSIONAL EXPERIENCE

Nov.. 2001 …… Professor,
Beirut Arab University
Physics Department
Beirut, Lebanon

Dec.. 1996 … . Associate Professor
Beirut Arab University
Physics Department
Beirut, Lebanon

January 1995 - 1997 Assistant Professor
Beirut Arab University
Physics Department
Beirut, Lebanon

October 1991 - June 1994 : Assistant Professor
September 1989 - June 1990 : Assistant Professor
October 1987 - June 1989 : Lecturer (part time)
American University of Beirut
Physics Department
Beirut, Lebanon

June 1991 - September 1991 Adjunct Assistant Professor
Concordia University
Physics Department
Montreal, Canada

July 1987 - September 1987 (Part time)
October 1989-February 1990 (part time) Assistant Professor

American University of Beirut
Faculty of Engineering and
Architecture, Beirut, Lebanon
Computer and Communication Department
Electrical Department

October 1979 - June 1987 : (part time)
Lebanese University,
Physics Department,
Beirut, Lebanon

October 1980 - June 1985 : (part time)
Lebanese University,
Faculty of Engineering
Beirut, Lebanon
Civil Engineering Department
Electrical Engineering Department

October 1978 - June 1989 : Teaching Physics
Chairman of the Physics Department
(oct.1986 - June1988)
International College
Beirut - Lebanon

October 1987 - June 1989 : Chairman of the Physics Department
in the preparatory year and the
Hariri secondary school (part time)
Hariri Foundation
Beirut - Lebanon

COURSES TAUGHT

Undergraduate:

-Electricity and magnetism
-General physics
-Modern physics
-Classical mechanics
-Mathematics for physists
-Statistical physics
-Quantum physics I and II
-Atomic physics
-Molecular physics
-Electromagnetic theory
-Numerical Analysis

-Scientific Language programming

Poste Graduate:

-Advanced Quantum physics
-Molecular spectroscopy
-Quantum field theory
- Bose Einstein Condensate

Publications

1. Hafez Kobeissi and Mahmoud Korek,
   Analytic expression of the rotation harmonics in the vibration-rotation wave function of a diatomic molecule.
   Int. J. Quant. Chem. 22, 23-29, (1982).

2. Hafez Kobeissi, Mounzir Dagher, Mahmoud Korek, and Ahmad Chaalan.
   A new treatment of the vibration-rotation eigenvalue problem for a diatomic molecule.
   J. Comput. Chem. 4, 218-226, (1983).

3. Hafez Kobeissi and Mahmoud Korek
   Rotation harmonics for a numerical diatomic potential.
   J. Physique 44, 1257-1262, (1983)

4. Hafez Kobeissi and Mahmoud Korek.
   Eigenvalue functions associated with diatomic rotation and distortion constants.
   J. phys. B: At. Mol. Phys. 18, 1155-1165, (1985).

5. Hafez Kobeissi, Mahmoud Korek, and Majida Kobeissi.
   canonical formulation of diatomic centrifugal distortion constants.
   Arab. J. Sc. Engin. 14, 503-511, (1989).

6. Mahmoud Korek.
   Rotation effect in the vibration-rotation wave function of a diatomic molecule.
   ICTP-LAMP Series Report 3, 1-35, (1989).

7. Hafez Kobeissi, Mahmoud Korek, and Mounzir Dagher.
   On the computation of diatomic centrifugal distortion constants: exact solution for initial value problems.
   J. Mol. Spectrosc. 138, 1-12, (1989).

8. Mahmoud Korek and Hafez Kobeissi.
   Diatomic Centrifugal Distortion for a RKR Potential: The Canonical function method.
   J. Mol. Spectrosc. 145, 44-450, (1991).

9. Ali El-Hajj, Hafez Kobeissi, and Mahmoud Korek.

A set of Subprograms for Calculating Eigenvalues for a Diatomic Molecule Using a Simplified Shooting Method.
Comput. Phys. Communications 74, 297-302 (1992).

10. Mahmoud Korek and Hafez Kobeissi.
Highly Accurate diatomic Centrifugal Distortion Constants.
J. Comput. Chem. 13, 1103-1108, (1992).

11. Hafez Kobeissi and Mahmoud Korek.
One Compact Analytic Expression of the centrifugal Distortion Constants to any Order.
J. Phys. B: At. Mol. Phys., 26, L35-40 (1992).

12. Mahmoud Korek and Hafez Kobeissi.
Diatomic Centrifugal Distortion constants for large orders at any level: application to the XO_g^+-I_2 state.
Can. J. Chem. 71, 313-317 (1993).

13. Hafez Kobeissi and Mahmoud Korek.
Diatomic Rovibrational Matrix Elements: Analytic expression of the Rotational Factor for any Potential.
J. Phys. B: At. Mol. Phy. 27, 3563 (1994).

14. Mahmoud Korek and Hafez Kobeissi
New Analytic expressions of the Herman-Wallis coefficients for the infrared transitions up to the third order.
J.Quant.Spectrosc.and Radiat.Trans. 52, 631 (1994)

15 Mahmoud Korek and Hafez Kobeissi
Relative Intensities in the Diatomic Vibration-Rotation Raman Spectra: A Simple Expression for Fundamental and Higher Overtones.
J. Quant. Spectrosc.and Radiat. Trans. 55, 225 (1995)

16. Mahmoud Korek and Hafez Kobeissi.
New Analytical Expression for the Rotational Factor in Raman Transitions.
Can. J. Phys. 73, 559 (1995).

17. Mahmoud Korek and Hafez Kobeissi
Analytical Expression for the Relative Intensities of the Pure Rotational Raman Spectral.
J. Quant. Spectrosc.and Radiat. Trans. 56, 881 (1996)

18 M. Korek and H. Kobeissi
Diatomic rovibrational matrix elements: compact exact value of the rotational factor for any potential and any operator.
Lebanese Scient. Res. Rep., 1, 63 (1996)

19 Mahmoud Korek
Analytical expression for the higher order Herman-Wallis Coefficients of a diatomic molecule
Can. J. Phys. 75, 795 (1997)

20. M. Korek and H. Kobeissi
Explicit pure rotational effect for diatomic molecule in infrared transition
J. Quant. Spectrosc.and Radiat. Trans. 60, 69 (1998)

21 Mahmoud Korek
Nonintegral expression for the reative intensities in infrared transitions of a diatomic molecule
J. Quant. Spectrosc.and Radiat. Trans. 62, 123 (1999)

22. Mahmoud Korek
A one directional Shooting Method for the computation of diatomic centrigugal distortion constants.
Comput. Phys. Commun. 119, 169 (1999)

23. Khaled Fakhreddine, H. Kobeissi, and M.Korek
Bound State of Coupled-Chanel Schrodinger Equation: A general Eigenfunction.
Int. J. Quant. Chem. 73, 325 (1999)

24. M. Korek, B. Hamdan, and K. Fakereddine
General explicit pure rotational effect for infrared, Raman and Higher ΔJ spectra for a diatomic molecule.
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25 Mahmoud Korek
Nonintegral expression for the reative intensities of the pure rotational infrared transitions of a diatomic molecule.
J. Quant. Spectrosc.and Radiat. Trans. 67, 323 (2000)

26. M. Korek, H. Kobeissi, and B. Hamdar
Analytical expressions for the Herman-Wallis coefficients in the Raman Q-Branch transitions of a diatomic molecule.
J. Quant. Spectrosc.and Radiat. Trans. 67, 159 (2000)

27. M Korek , A.R.Allouche, M. Kobeissi, M. Dagher and M. Aubert-Frecon
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Chem. Phys. 256,1, (2000)

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Theoretical study of the electronic structure of the RbCs Molecules.
J.Phys.B 33, 2307 (2000)

29. M. Korek and K. Fakhreddine
A canonical approach for computing the eigenvalues of the Schrodinger eqution

for double well potentials.
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Can. J. Phys. 78, 977 (2000)

31. Mahmoud Korek
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Lebanese Science Journal 2, 101 (2001)

32. Mahmoud Korek and Abdul Rahman Allouche
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33. Mahmoud Korek and S.N Abdulal
Potential curves and rovibrational calculation of electronic states of the molecular ion KCs^+
Can. J. Phys. 80, 1025 (2002)

34. Hussein Fahs, Mahmoud Korek, and Abdul Rahman Allouche
Theoretical electromic structure of the low-lying states of LaF molecule
J. Chem. Phys. 117, 3715 (2002)

35. Hussein Fahs, Mahmoud Korek, and Abdul Rahman Allouche
The theoretical spin-orbit structure of the RbCs molecules
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36. Mahmoud Korek, Ghassan Younes and Abdul Rahman Allouche
Theoretical study of the low-lying electromic states of the molecular ion KRb^+
Int. J. Quant. Chem., 92, N0 4 (2003)

37. Alia Jraij, Abdul Rahman Allouche, Mahmoud Korek and M. Aubert-Frecon
Theoretical electromic structure of the alkali dimmer cation Rb_2^+
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Theoretical electromic structure of the low-lying states of Lacl molecule
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39. Mahmoud Korek and Bassam Hamdoun
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Internet Electronic J. Mol. Dsign, 3, 271 (2004)

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Chem. Phys. 310, 145 (2005)

41. Saleh N. Abdul Al, Mahmoud Korek, and Abdul Rahman Allouche
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Chem. Phys. 308, 1 (2005)

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electromic transition moment with spin-orbit coupling of the molecular ion KRb^+
Int. J, Quant, Chem., 101, 84 (2005)

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Theoretical structure of the low laying electronic states of the Ytrium fluoride YF.
Chem. Phys. 315, 183 (2005)

45. M.Korek, Y. A. Moghrabi, A.R.Allouche
The theoretical spin-orbit calculation of the molecule KCs
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46. M. Korek, A. M Moghrabi, A. R. Allouche, M. Aubert-Frécon
Theoretical electronic structure including spin-orbit effects of the molecular ion $LiCs^+$
Can. J. Phys. 84, 959 (2006)

47. A. Jraij, A.R. Allouche, F. Rabilloud, M. Korek, M. Aubert-Frécon, D. Rayane, I. Compagnon , R. Antoine, M. Broyer, Ph.Dugourd
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A New Formulation for the Herman-Wallis Coefficients for Infrared Transitions of A Diatomic Molecule.
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49. S. Abdul-Al, M. Korek, A. R. Allouche , and M. Aubert Frécon
Theoretical structure of the low laying electronic states of the Ytrium fluoride YBr.
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Theoretical calculation of the excited electronic states of the molecule NaCs with spin-orbit effect.
J. Chem. Phys. 126, 124313 (2007)

51. R. Awad, A. I. Abou-Ali, I. H. Ibrahim, M. Korek, S. Isber, A.Faraj

Superconducting properties of zinc substitution in TI-2223 phase
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Theoretical electronic states of ScCl molecule below 22500 cm^{-1}
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54. M. Korek, S. Kontar, F. Taher-Mansour, A.R.Allouche
Theoretical electronic structure of the molecule ScI.
Int. J. Quant. Chem. 109, 236 (2009)

55. M. Korek, M. Rida, A. Jbara
Theoretical Calculation of the Low Laying Electronic States of the Molecular Ion KH^+
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56. M. Korek, S. Hammoud, A. R. Allouche, and T. Harb
Theoretical calculation of the low lying electronic states of the molecular ion RbH^+ with spin-orbit effects
J. Chem. Phys. 129**, 204304 (2008)**

57. M. Korek, M; Badreddine, K; Allouche, A R
Theoretical study with spin-orbit effects and electronic transition moment calculation of the ion $NaCs^+$
Can. J. Phys. 86, 1015 (2008)

58. M. Korek, O. Fawwaz, A. R. Allouche
Theoretical calculation of the electronic states with spin-orbit effects of the molecule NaRb.
Int. **J. Quant. Chem. 109 938 (2008)**

59. M. Korek, S. Al-Shawa, G. A.Younes
Theoretical Calculation of the Electronic Structure of Molecule LiRb Including the Spin-Orbit Interaction.
J. Mol. Struct. THEOCHEM 899, 25 (2009)

60. M. Korek and S. N. Abdul-Al
Rovibrational Study and Dipole Moment Calculation of the Molecule YF with Spin- Orbit interaction
Chem. Phys. 355, 130 (2009)

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Theoretical calculation of the low laying electronic states of the molecular ion RbH^+
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62. A. Hamdan, M. Korek
Theoretical calculation of the low-lying sextet electronic states of CrF molecule
Chem. Phys. (2009) Chem. Phys. 369 (2010) 13–18

63. N. Elkork, D. Houalla, and M. Korek*
Theoretical Calculation of the Electronic States with Spin-Orbit Effects of the Molecule LiCs
Can. J. Phys. 87, 1079 (2009)

64. Bassel Abdel Samad, Marie Francoise Blanc mignon, Mohamed Roumie, Ali Siblini,
Jean Pierre Chatelon, Mahmoud Korek**.**
PHYSICO-CHEMICAL CHARACTERIZATION OF MULTILAYER YIG THIN FILM DEPOSITED BY RF SPUTTERING.
Eur. Phys. J. Appl. Phys. 50, 10502 (2010)

65. M. Korek, M. Rida, A. Jbara
Theoretical Calculation of the Low Laying Electronic States of the Molecular Ion KH^+ with spin-orbit effects
J. Mol. Struct. **THEOCHEM 949, 70 (2010)**

66. M. Korek, A. Farhat, and S. N. Abdul-Al
Theoretical calculation of the low-lying electronic states of the molecule YS
J. Theo. Comp. Chem., 9, 597 (2010).

67**.** A. Hamdan, and M.Korek
Theoretical Calculation of the low lying Quartet States of the CrF Molecule
Can. J. Chem. Vol. 89(10), p: 1304 - 1311 (2011)

68. A. Hamdan, M. Korek
Theoretical calculation of the low-lying quartet electronic states of CrCl molecule
Int. J. of Quant. Chem., Vol 111, 2960–2965 (2011)

69. A. Hamdan, M. Korek
Spin–Orbit Electronic Structure of the ScBr Molecule
J. Mod. Phys. 2, 1172-1177 (2011)

70. A. Mawassi, R. Awad, M. Roumie, M. Korek, amd I. Hassan
Effect of ZnO monoxide addition on the superconducting properties of the (Bi, Pb) Phase.
Advanced Material Research 324, 241-244 (2011)

71. Mahmoud Korek, Sara El Atwani, Rasha Abou Arkoub, and Hadeel Razzouk
The low lying excited electronic states of an alkali-earth compounds
Advanced Material Research 324, 282-285 (2011)

72. A. Hamdan, M. Korek
Theoretical calculation of the low-lying sextet electronic states of CrCl molecule
Int. J. Quant. Chem. 112, 1235–1242 (2012)

73. A. Farhat, M. Korek, M. A. L. Marques, S. N. Abdul-Al
Ab initio calculation of the low-lying electronic states of the molecule ZrN
Can. J. Chem 90, 631–639 (2012)

74. Khalil Badreddine, Nayla El-Kork, and Mahmoud Korek
Electronic structure with rovibrationl and dipole moment study of the NiO molecule
J. Mod. Phys. 3, 839-849 (2012)

75. A. Farhat, M. Korek , S.N. Abdul-Al d, M.A.L. Marques
Electronic structure with spin orbit calculations of the low-lying electronic states of the molecule YS
Chem. Phy. 412, 109–116 (2013)

76. S. N. Tohme, M. Korek
Electronic structure and rovibrational calculation of the low-lying states of the RbYb molecule
Chem. Phys. 410, 37–44 (2013)

77. Khalil Badreddine, Nayla El-Kork, Mahmoud Korek
Theoretical Study with Rovibrational and Dipole Moment Calculation of the SiO Molecule
J. Mod. Phys. 4, 82-93 (2013)

78. Khalil Badreddine, Nayla El-Kork, and Mahmoud Korek
Electronic Structure of the Nanodiatomic Compounds CdS
J. Phys. Sci. &Appl. 3, 27-32 (2013)

79. M. Korek and H. Hammour
Electronic structure with rovibrational and dipole moment calculations of the LaS molecule
Phys. Rev. & Res. Int. 3, 176-190 (2013)

80. M. Korek, Nayla El-Kork, A. N. Moussa, and A. Bentiba
Theoretical study with rovibrational and dipole moment calculation of the LaO molecule
Chem. Phys. Lett. 575, 115-121 (2013)

81. F. Jardali and M. Korek
Electronic Structure and Rovibrational Calculation of the Low-Lying Electronic States of the SrF Molecule
Comput. Theo. Chem. (2013) Submitted.

82. H. Jawhari and M. Korek
Theoretical electronic structure of the lowest-lying electronic states of the CaBr molecule
Can. J. Chem. (2013) Submitted

BOOKS

1. Title of the book: New Quantum Chemistry Research
Title of the chapter: electronic transition moment with spin-orbit coupling of the molecular ion $LiRb^+$
Publisher: Nova Science Publishers, Inc. 400 Oser Avenue, Suite 1600 Hauppauge, NY 11788

2. Title of the book: Quantum Frontiers of Atoms and Molecules
Title of the chapter: Theoretical calculation of the low laying electronic states of the molecular ion CsH^+ with spin-orbit effects
Publisher: Hindawi Publisher, New York

Reviewer:

Journals:

- Journal of Physical Chemistry
- Chemical Physics Letter
- International Journal of Physical Science
- Molecular Physics
- Trans. Tech. Publications
- Can. J. Chem

Research Projects:

- Oklahoma University
- American University of Beirut
- Lebanese Council for Scientific Research

Thesis:

- *Elaboration de films catalytiques Co- alumine par dépôt Électrophorétique*
Student: Rita Chamoun
University Claude Bernard, Lyon France

- *l'étude théorique de la structure électronique des molécules AlBr, AlI, LuF et LuCl par les méthodes ab initio*
  Student: Yaman Hamade
  University Claude Bernard, Lyon France

- *Temperature-Pressure phase diagrams, structural and electronic Properties of binary and pseudobinary semiconductors: an ab initio study*
  Student: Abdel Hassan breidy
  University Paul Verlaine, Metz, France

ABSTRACTS AND PRESENTATIONS:

83. Hafez Kobeissi and Mahmoud Korek
Nouvelle determination des niveaux d'energie de certain potentials de l'etat X-CO
Seventh Science Meeting of the lebanese association for advancement of Science, Beirut, Lebanon, (1981).

84. Hafez Kobeissi and Mahmoud Korek
Expression analytique exact des harmoniques de rotation de la function d'onde de vibration-rotation d'une molecule diatomique
Seventh Science Meeting of the lebanese association for advancement of Science, Beirut, Lebanon, (1981).

85. Mahmoud Korek and Hafez Kobeissi
Rotation harmonics for a numerical diatomic potential
Eight Science Meeting of the Lebanese Association for Advancement of Science, Beirut, Lebanon, (1984).

86. Hafez Kobeissi and Mahmoud Korek.
Separate eigenvalue equation for the rotational constants for any potential in diatomic molecule
Eight Science Meeting of the Lebanese Association for Advancement of Science, Beirut, Lebanon, (1984).

87. Hafez Kobeissi and Mahmoud Korek
On tne diatomic distortion constants eigenvalue function
9th Science Meeting of the Lebanese Association for Advancement of Science, Beirut, Lebanon.

88. Hafez Kobeissi and Mahmoud Korek
Constribution to the study of the rotation effect in the Franck-Condon factors
9th Science Meeting of the Lebanese Association for Advancement of Science, Beirut, Lebanon.

89. Hafez Kobeissi, Mahmoud Korek, and Mounzir Dagher
On the vibration characteristics of the Lenard Jones Diatomic potential function
10th Science Meeting of the Lebanese Association for advancement of Science, Beirut, Lebanon, (1987).

90. Hafez Kobeissi, Mahmoud Korek
Diatomic rotation-vibration wave function normalization: A linear dependence on the rotational effect
10th Science Meeting of the Lebanese Association for advancement of Science, Beirut, Lebanon, (1987).

91. Hafez Kobeissi, Mahmoud Korek
On the computation of the diatomic transition integrals: An efficient numerical procedure.
10th Science Meeting of the Lebanese Association for advancement of Science, Beirut, Lebanon, (1987).

92. Mahmoud Korek
Workshop on Science and technology education and future human needs,
Bangalor, India, (1985).

93. Mahmoud Korek
Change in society require that scientific and technological skills be an essential part of educationfor all,
Hobart, Tasmania-Australia, (1986).

94. Mahmoud Korek and Hafez Kobeissi
On the Sturn-Liouville numerical problem: A noncoventional approach.
Second Conference on Physics of Condensed Matter, Amman, Jordan, (1989).

95. Mahmoud Korek and Hafez Kobeissi
Analytical expression for the dipole moment matrix element for v-v', vibration-rotation bands of diatomic molecule.

XIth International Conference on High Resolution Infrared Spectroscopy, Prague, Czechoslovakia, (1990).

96. Mahmoud Korek and Hafez Kobeissi
On the limitation to the use of the Herman-Wallis (rotational) factor in diatomic radial matrix elements.
XIIth international conference on high resolution infrared and microwave Spectroscopy.
Prague, Czechoslovakia, (1992).

97. Mahmoud Korek and Hafez Kobeissi
On the rotational effect in diatomic spectra: Simple analytical expressions of the Herman - Wallis coefficients for any potential.
XIIIth international conference on Raman Spectroscopy, Wurzburg – Germany, (1992).

98. Hafez Kobeissi and Mahmoud Korek
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XXIth European Congress on molecular spectroscopy, Vienna - Austria, (1992).

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Analytical expression of the vibration-rotation Franck-Condon overlap integrals for a diatomic molecule.
International conference on condensed matter Physics and applications, Bahrain, (1992).

101. 3 eme Colloque: Journée de Spectroscopie Moléculaire"
Reims, France ,July, 7-8 1988

102. Mahmoud Korek
A new formulation for the eigenvalue and the eigenfunction in the perturbation Theory
The 13th Science Meeting (the National Council for Scientific Reaserch)
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103. Mahmoud Korek and Ahmad Chaalan
Theoretical electronic structure and rovibrational calculation of the molecule RbCs
The 13th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon (1999)

104. Mahmoud Korek
An explicit rovibrational effect in the Raman Q-branch transition of a diatomic Molecule
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105. Mahmoud Korek and Khaled Fakhreddine
Analytic Expression for any pure rotational transition for a diatomic molecule
The 13th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon (1999)

106. Mahmoud Korek
Analytical expression for the relative intensity of a diatomic molecule
Annual meetimg of the Federation of Anlytical Chemistry an Spectrosciopy Society, Vancouver, Canada (1999).

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Theoretical study of the excited states of the molecule KCs
International Conference on Reaserch Trends in Science and Technology Beirut, Lebanon LAU(2000)

108. Mahmoud Korek
On the integration of the Schrodinger equation for a symmetrical potential
International Conference on Reaserch Trends in Science and Technology Beirut, Lebanon LAU (2000)

109. Mahmoud Korek and Ahmad Chaalan
Theoretical study of the electronnic structure of different states of the molecule LiCs
Deuxieme Collogue Franco-Libanais sur la Science des Materiaux 25-26 mai (2000)

110. S. Roussau A.R.Allouche and M. Korek
Srtucture electronique incluant les spin-orbite pour les molecules KRb et RbCs
Collogue de la division de Physique Atomique, moleculaire et optique de la Societe Francaise de Physique. Lyon, France 10-13 Juillet (2000)

111. Mahmoud Korek and Ahmad Chaalan
Theoretical approach of the electronnic structure of the molecule LiRb
The 14th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon 23-25 Nov.(2000)

112. Mahmoud Korek and Nabhan Abdul al
Theoretical prediction of the electronnic states of the molecular ion KCs^+
The 14th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon 23-25 Nov.(2000)

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Theoretical study of the electronnic structure of different states of the KRb^+ Molecular ion
The 14th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon 23-25 Nov.(2000)

114. Mahmoud Korek
Potential curves and rovibrational calculation of numerous electronnic states of the molecular ion $RbCs^+$
The 14th Science Meeting (the National Council for Scientific Reaserch) Beirut, Lebanon 23-25 Nov.(2000)

115. O. Fawwaz, M. Korek and A.R.Allouche
Excited electronic states and spectroscopy study of the molecule NaRb.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux , 26-28 Mai 2004, Beyrouth – Liban.

116. K.Badreddine, M. Korek and A.R.Allouche
Vibration-rotation calculation of the electronic states molecular ion $NaCS^+$.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux , 26-28 Mai 2004, Beyrouth – Liban.

117. A.Moughrabi, M. Korek and A.R.Allouche
Potential energy curves and spectroscopic studies of the electronic states molecular ion $LiCs^+$.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux , 26-28 Mai 2004, Beyrouth – Liban.

118. D.Houalla, M. Korek and A.R.Allouche
Spin-orbite calculation of the excited electronic states of the molecule LiCs.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux ,
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119. S.Shawwa, M. Korek and A.R.Allouche
Potential energy curves and spectroscopic calculation of the electronic states molecule LiRb.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux ,
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Spectroscopic calculation of the excited electronic states with Spin-orbite Effect of the molecule NaCs.
Quatrieme Collogue Franco-Libanais sur la Science des Materiaux ,
26-28 Mai 2004, Beyrouth – Liban

121. Y. Moughrabi, M. Korek and A.R.Allouche
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Quatrieme Collogue Franco-Libanais sur la Science des Materiaux ,
26-28 Mai 2004, Beyrouth – Liban

122. S. Kantar, M. Korek and A.R.Allouche
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Quatrieme Collogue Franco-Libanais sur la Science des Materiaux ,
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123. C. Deeb and M. Korek
A new formulation for the Herman Walliscoefficients for infrared transitions of a diatomic molecule
Cinquieme Collogue Franco-Libanais sur la Science des Materiaux ,
17-19 Mai 2006, Beyrouth – Liban

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Cinquieme Collogue Franco-Libanais sur la Science des Materiaux ,
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Theoretical study withspin-orbit effect and electronic transition moment calculation of the ion RbH^+
Cinquieme Collogue Franco-Libanais sur la Science des Materiaux , 17-19 Mai 2006, Beyrouth – Liban

126. A. R. Allouche, M.Frecon, H.Ratiney, D. Graveron and M. Korek
Determination theorique des deplacemnt chimique et des couplages de spin du Gaba en vue de sa detection in vivo spectroscopy de resonance magnetique SRM
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127. M. El Korek, A. Madi, and A.R.Allouche
The Theoretical Calculation with Spin Orbit Effect of the Electronic States of the Ion $LiRb^+$
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128. M.Korek and D.Houalla
Theoretical study of the electronic states with spin-orbit effect and rovibrational calculation of the molecule LiCs.
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The *Theoretical Calculation of the Electronic States of the Molecular Ion KH^+*
International Conference of Computational Methods in Sciences and Engineering 2007 (ICCMSE 2007), Greece, 25-30 September 2007.

130. M. Korek, A. Hamdan, A. Allouche
Theoretical electronic structure of the molecule ScBr
The Second Arab International Conference in Physics and Materials Science (CPMS) Alexandria, Egypt October 27 - 29, 2007

131. M.Korek
University and education on the Islamic-Christian dialogue
The 6th Christian exposition, Beirut Nov 30-Dec.9 2007

132. M. Korek, A. Hamdan, H. Abdel Nabi, R. Halabi, J. Srour, and A.R. Allouche
b initio Calculation of Molecular States of Compounds of the Scandium and Vanadium Molecules

2d World Conference on Magic BulletEhrlich II **October 3 - 5, 2008 Nürnberg, Germany,**

133. H. Abdel Nabi, M. Korek
Ab initio Molecular States Calculation of VO Molecule
The 15th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, October 2008

134. H. Hammour and M. Korek
Theoretical electronic structure of the molecule LaS
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135. M. Korek, A. Hamdan
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136. M. Korek, A. Hamdan
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Electronic structure of the low-lying electronic states of the molecule CrCl
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138. Mahmoud Korek and Bouchra Younes
Structure électronique avec un calcul rovibrationel pour une molécule formée d'un alcalin et un alcalino-terreux
Pamo_Jsm April 26, 2010, Orsay, France

139. Mahmoud El Korek and Baraa Yamout
Electronic structure of the low-lying electronic states of alkaline and alkaline-earth molecule
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140. Anwar Echtay and Mahmoud El Korek
An ab initio Calculation of low lying electronic sates of the CaF Molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

141. Khalil Badreddine and Mahmoud El Korek
Theoretical Electronic structure of nanodiatomic compounds
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

142. Salman Mahmoud and Mahmoud El Korek
Theoretical and Spectroscopic Studies of the Molecule LiH
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

143. A. Farhat, S. N. Abdul-Al, and M. Korek, and Yves Monteil
Spin Orbit Electronic Structure of the Molecule YS
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

144. Sarah Atwani and Mahmoud Korek
Theoretical study of low lying states of the monohalides SrH molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

145. Baraa Yamout and Mahmoud El Korek
Electronic Structure of the Low-Lying Electronic States of Alkaline and Alkaline-Earth Molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

146. Hadeel Razzouk and Mahmoud El Korek
Theoretical Calculation of Electronic States of BeH Molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

147. Bouchra Younes and Mahmoud El Korek
A Rovibrational Calculation of Low-Lying Electronic States of LiCa Molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

148. Juliana Srour and Mahmoud Korek
Electronic structure of low lying states of the ScO molecule
The 17th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, November 2010

149. Rasha Abou Arkoub and Mahmoud El Korek
Theoretical Electronic structure of the Molecule MgH
The 17th International Conference Of the Lebanese association for the

Advancement of Science Beirut – Lebanon, November 2010

150. Mahmoud Korek, Sara El Atwani, Rasha Abou Arkoub, and Hadeel Razzouk
The low-lying excited Electronic States of an Alkali- Earth Compounds
Mediterranean Conference on Innovative Materials and Applications Beirut – Lebanon, March 15-17, 2011

151. Khalil Badreddine and Mahmoud Korek
Electronic structure of the nanodiatomic compounds CdS
Mediterranean Conference on Innovative Materials and Applications Beirut – Lebanon, March 15-17, 2011

152. Khalil Badreddine[1,a], Nayla El-Kork[2,b], and Mahmoud Korek[1,c*]
Low-Lying Electronic states of the nanodiatomic compounds CdS
IEEE NANO 2011 Conference, August 15-18, 2011

153. Borhan Rashid El Shafii, Fouad El hajj Hassan and Mahmoud Korek
Electronic structure of a metal compounds
The 18th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 22-24, 2012 March

154. Lawand Hantoush and Mahmoud El Korek
Theoretical and Spectroscopic Studies of the Molecule LiF
The 18th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 22-24, 2012 March

155. El-Korjieh Farah and El Korek Mahmoud
Rovibrational study of electronic states of the BeF molecule
The 18th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 22-24, 2012 March

156. Anwar John Shtay and Mahmoud El Korek
Electronic Structure of the Low-Lying Electronic States of CaF Molecule
The 18th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 22-24, 2012 March

157. Tohme Samir and Korek Mahmoud
Ab initio Calculation of Electronic States of YbRb Molecule
The 18th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 22-24, 2012 March

158. Mahmoud A. Korek, Amal N. Moussa
Electronic Structure of the Low-lying Quartet Electronic States of the Molecule LaO
WASET 2012 MADRID, SPAIN INTERNATIONAL CONFERENCE PROGRAM March 28-29, 2012.

159. Khalil Badreddine, and Mahmoud Korek*
Electronic structure of the nanodiatomic compounds CdS
European Seminar on Computing Pilsen, Czech Republic, June 25 - 29, 2012

160. Fatima Jardali and Mahmoud El Korek
Theoretical studies of a diatomic florid of alkaline-earth compound
The 19th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 5-6, 2013 April

161. Abir Youssef and Mahmoud El Korek
Electronic structure and rovibrational studies of diatomic Zinc compounds
The 19th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 5-6, 2013 April

162. Hussam Jawhari and Mahmoud El Korek
Ab initio calculations and rovibrational studies of the calcium halides diatomic molecules
The 19th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 5-6, 2013 April

163. Sahar Kontar and Mahmoud El Korek
Electronic structure with dipole moment of diatomic helium compounds
The 19th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 5-6, 2013 April

164. Salman Mahmoud and Mahmoud El Korek
Theoretical calculation with rovibrational study of a metal nitrate
The 19th International Conference Of the Lebanese association for the Advancement of Science Beirut – Lebanon, March 5-6, 2013 April

Supervision of Thesis

A) The Ph.D Degree

1) Doctorat Nouveau Regime, Universite' Claude Bernard Lyon1, France
Title:
Approche Theorique de quelques molecules diatomiques composees d'alcalins

Date of defense: July 7, 2000.
Student: Ahmad Chaalan

2**) Doctorat Nouveau Regime, Universite' Claude Bernard Lyon1, France**
Title:
Spectre et proprietes electroniques de petits systems
Date of defense: April 23. 2003
Student: Alia Jraij

3) **Doctorat Nouveau Regime, Universite' Claude Bernard Lyon1, France**
Title:
Etude theorique de la structure electronique de molecules diatomiques comportant un atome de l'anthane

Date of defense: Sepember 24. 2005
Student: Hussein Fahs

4**) Doctorat Nouveau Regime, Universite' Claude Bernard Lyon1, France**
Title:
Spectre et proprietes electroniques des composes de la molecule Y

Date of defense: September 23, 2005
Student: Saleh N. Abdul Al

5) **Ph.D in Physics Beirut Arab University**
Title:
Transport properties of new high temperature superconductor materials

Date of defense: May 2007
Student: Ahmad Faraj.

6) **Doctorat Nouveau Regime, Saint Etienne University, France**
Title:
Elaboration et Caractérisation de couche mince de grenat de fer et d'yttrium, applications dans les domaines de magnéto-optique et hyperfrequence

Date of defense: Sept. 2009
Student: Bassel Abd Elsamad

7) **Ph.D in Physics Beirut Arab University**
Title:
Theoretical study in Radiation

Date of defense: June. 2010
Student: Salam Noureddine

8) **Ph.D in Physics Beirut Arab University**
Title:
Spectroscpic study with spin orbet effect of diatomic molecules

Date of defense: Nov. 2010
Student: Alaa hmadan.

9) **Doctorat Nouveau Regime, Universite Claude Bernard Lyon I, France**
Title:
Electronic Structure of Molecules compounds of Y and N atoms
In preparation
Date of defense: June. 2012
Students: Ayman Farhat

10) **Doctorat Nouveau Regime, Universite Claude Bernard Lyon I, France**
Title:
Investigation of new Nanomaterials for Photovoltiac and potential device applications
In preparation
Students: Mohamad Kawwam

11) **Ph.D in Physics Beirut Arab University**
Title:
Theoretical Electronic structure of nanodiatomic compounds
Date of defense: April 12, 2013
Student: Khalil Badreddine

12) **Ph.D in Physics Beirut Arab University**
Title:

Effect of nano-scale addition on the physical properties of high temperature superconductors

In preparation
Student: Rafaat Mawassi

13) **Ph.D in Physics Beirut Arab University**

Theoretical studies of the fundamental properties of Hg Chalcogenides HgX (X= S, Se, Te) and their alloys

In preparation
Student: Burhan Rashid ElShafai

14) **Ph.D in Physics Beirut Arab University**

Electronic structure and rovibrational studies of diatomic Zinc compounds

In preparation
Student: Abir Youssef

15) **Ph.D in Physics Beirut Arab University**

Electronic structure of transition metals sulfide

In preparation
Student: Sally El Shawa

16) **Ph.D in Physics Beirut Arab University**

Electronic structure and spectroscopic studies of diatomic compounds of Silicon atom

In preparation
Student: Karam Hamdan

17) **Ph.D in Physics Beirut Arab University**

Theoretical calculation of transition metals oxides

In preparation
Student:Diana Kaaen

18) **Ph.D in Physics Beirut Arab University**

Ab initio calculation and rovibrational studies of the calcium halides diatomic molecules.

In preparation
Student: Hussam Jawhari

19) **Ph.D in Physics Beirut Arab University**

Theoretical studies of diatomic arsenic compounds.

In preparation

Student: Khaled Mourad

20) **Ph.D in Physics Beirut Arab University**

Electronic structure of diatomic helium compounds.

In preparation

Student: Shar Kontar

21) **Ph.D in Physics Beirut Arab University**

Elctronic structure of halids of Alkaline-earth compounds.

In preparation

Student: Dunia Hawalla

22) **Ph.D in Physics Beirut Arab University**

Theoretical calculations and rovibrational studies of the zinc halides diatomic molecules.

In preparation

Student: Soumia Moussaoui

22) **Ph.D in Physics Beirut Arab University**

Electronic structure of polar molecules towards ultracold sources.

In preparation

Student: Mahdi Mansour

23) **Ph.D in Physics Beirut Arab University**

Study of the low lying electronic states of metals nitatre

In preparation

Student: Salman Mahmoud

B) The Master Degree of Science

17. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure of the Molecular Ions KCs+ and $RbCs^+$

Date of defense: July 3, 2001
Student: Saleh Abdel al

18**. The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure of the alkali dimmer cation $LiCs^+$

Date of defense: April 2005
Student: Ahmad Moughrabi

19**. The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure of the alkali dimmer KCs

Date of defense: April 2005
Student: Yahia A Moughrabi

20. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure of the Molecular Ion $NaCs^+$

Date of defense: May 2005
Student: Khalil Badreddine

21. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure of the Molecule NaCs

Date of defense: June 2005
Student: Sahar Bleik

22. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical Studies of the Electronic Structure

of the Molecule LiCs

Date of defense: June 2005
Student: Dunia Hwalla

23. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Theoretical Studies of the Electronic Structure of the Molecular Ion $LiRb^+$

Date of defense: June 2005
Student: Amal Madi

24. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Theoretical Studies of the Electronic Structure of the Molecule ScI

Date of defense: June 2005
Student: Sahar Kantar

25. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Potential energy curves and spectroscopic calculation of the electronic states of the molecule LiRb

Date of defense: June 2005
Student: Sally El Shawa

26. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
A New Formulation for the Herman-Wallis Coefficients for Infrared Transitions of A Diatomic Molecule

Date of defense: June 2007
Student: Claire Deeb

27. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Excited electronic states and spectroscopic studies of the molecule ScBr (Scandium Bromide)

Date of defense: June 2007
Student: Alaa Hamdan

28. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Theoretical Studies of the Electronic Structure of the Molecular Ion RbH^+

Date of defense July 2007
Student: Sami Hammoud

29. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
An extemsive theoretical study for the photon average path length calculation inside paralleliped Gamma-ray detectors

Date of defense July 2007
Student: Abdelhasan Ali Breidy

30. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
Theoretical Studies of the Electronic Structure of the Molecular Ion CsH^+

Date of defense Feb 2009
Student: Hussam Jawhari

31. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
An ab initio Calculation with Vibration-Rotation Study of the Molecule VO

Date of defense June 2009
Student: Hana Abdul Anabi

32. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:
PIXE identification of fine and coarse particles of aerosol samples from Beirut

Date of defense June 2009
Student: Hadi Basma

33. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical Calculations with Spin-Orbit Coupling of the Molecule YS

Date of defense June 2009
Student: Ayman Farhat

34. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

RBS Characterization of Yttrium Iron Garnet (YIG) Thin Films Elaborated by Radio Frequency Sputtering

Date of defense June 2009
Student: Mehdi Mansour

35. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical calculation calculation of the electronic states with spin-orbit effect of the Molecule NaRb

Date of defense Feb 2009
Student: Oussama Fawwaz

36. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical studies of the low lying electronic states of the Molecule LaO

Date of defense May 2009
Student: Amal Moussa

37. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

An ab initio Calculation with Vibration-Rotation Study of the Molecule ScS

Date of defense May 2010
Student: Rawad El Halabi

38. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical Calculations of the low laying electronic states of

the Molecule ScO

Date of defense Sept. 2010
Student: Juliana Srour

39. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical Calculations with Spin-Orbit Coupling of the Molecule LaS

Date of defense: Nov.2010
Student: Huda Hammour

40. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Extensive Theoretical Study for the Photon Path Length Calculation inside Cylindrical Gamma-ray Detectors Using Marinelli Beaker

Date of defense Jan. 2011
Student: Oussama Abou Ibrahim

41. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic structure of a diatomic compound of an alkaline and an alkaline earth

Date of defense: May 10, 2011
Student: Rasha Abou Arkoub

42. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical Studies of the Electronic Structure of the Molecular Ion KH^+

Date of defense May 2011
Student: Amina Jbara

43. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical calculation of a compound of an alkaline diatomic molecule

Date of defense: June 2011
Student: Salman Mahmoud

44. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic structure of an Alkaline and Alkaline Earth diatomic molecule

Date of defense: Nov. 2011
Student: Sara Atwani

45. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic structure of molecular states of a diatomic molecule

Date of defense: Dec. 2011
Student: Baraa Yamout

46. **The Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical calculation of an alkaline-earth compound of Hydrogen atom

Date of defense: Feb. 2012
Student: Hadeel Razzouk

47. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical Study of the Electronic states of alkaline and alkaline-earth molecule

Date of defense: April 2012
Student: Bouchra Younes

48. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

An ab initio Calculation with Vibration-Rotation Study of the Molecule CaF

Date of defense: May 2012
Student: Anwar Echtay

49. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic structure and rovibrational calculation of a heavy diatomic compound

Date of defense: June 2012
Student: Samir Tohme

50. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic Structure with rovibrational study of LiF Moleucle

Date of defense: Sept. 2012
Student: Lawand Hantoush

51. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic Structure of a Compound of an Alkaline Earth Diatomic molecule

Date of defense: Oct. 2012
Student: Farah Korjieh

52. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

RBS Characterization of multilayer YIG thin films deposited by radio-frequency reactive magnetron sputtering

Date of defense: Jan. 2013
Student: Zouhair Bitar

53. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical studies of a diatomic compound of mercury

In preparation
Student: Nabil Kazem

54. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**

Title:

Theoretical studies of a diatomic florid of alkaline-earth compound

Date of defense: Sept. 2013
Student: Fatima Jardali

55. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Theoretical studies of a Lanthanide Monofluoride compound

In preparation
Student: Batoul Helbaoui

56. T**he Degree of Master of Science, Beirut Arab Universite, Beirut, Lebanon**
Title:

Electronic Structure of III-V group molecules and their electric conductance in nano-wires

In preparation
Student: Hani Al Korek