

## السيرة الذاتية

البيانات الشخصية:

الاسم : د. فادي قمر

الجنسية : عربي – سوري

تاريخ ومكان الميلاد: دمشق 1974

العنوان الدائم : دمشق - اطفائية - شارع خالد بن الوليد.

العنوان الحالى : دمشق – اطفائية – شارع خالد بن الوليد.

الحالة الاجتماعية : عازب

الهاتف الجوال: 0969872437

fadiqamar@hotmail.com : البريد الالكتروني

اللغات التي يجيدها: العربية - الانكليزية.

الشهادات العلمية : - دكتوراه اختصاص تكنولوجيا الليزر من جامعة مانشستر -بريطانيا 2005.

- ماجستير اختصاص الكترونيات ضوئية أجهزة الليزر من جامعتي هريوت واطوسانت ندروس - بريطانيا 2000.

- دبلوم فيزياء حديثة: قسم الفيزياء - كلية العلوم - جامعة دمشق 1996.

- بكالوريوس: قسم الفيزياء - كلية العلوم - جامعة دمشق 1995.

السجل الوظيفي : أستاذ مساعد في قسم الفيزياء - كلية العلوم - جامعة دمشق 2012.

مدرس في قسم الفيزياء - كلية العلوم - جامعة دمشق 2006.

معيد موفد إلى بريطانيا 1995.

معيد في قسم الفيزياء - كلية العلوم - جامعة دمشق 1997.

#### الخبرة الجامعية:

1- المواد لتي قام بتدريسها:

أ- المرحلة الجامعية الأولى:

- "الضوء الفيزيائي" لطلاب السنة الثالثة في قسم الفيزياء منذ عام 2005 وحتى الآن.
- "اللغة الإنجليزية" لطلاب السنة الرابعة في قسم الفيزياء للأعوام الأكاديمية 2005، 2008 "اللغة الإنجليزية" لطلاب السنة الرابعة في قسم الفيزياء للأعوام الأكاديمية 2006.
  - "اللغة الإنجليزية" لطلاب السنة الثانية في قسم الفيزياء للعام الدر اسي 2006.
    - "تاريخ الفيزياء" لطلاب السنة الرابعة في قسم لفيزياء 2006.
    - "فيزياء الليزر" السنة الرابعة في قسم لفيزياء منذ عام 2007 وحتى الآن.
    - "فيزياء عامة 2" لطلاب السنة الأولى في قسم الكيمياء للعام الأول 2008.
  - "فيزياء طبية" لطلاب السنة الأولى تغذية في جامعة القلمون الخاصة 2008.
  - "فيزياء طبية" لطلاب السنة الأولى طب الأسنان في في جامعة القلمون الخاصة 2008 .
  - "المشكلات البيئية باللغة الأجنبية" لطلاب سنة ثالثة في قسم البيئة منذ عام 2012 وحتى الآن.
  - "أنظمة الجودة البيئية باللغة الأجنبية" لطلاب سنة رابعة في قسم البيئة منذ عام 2013 وحتى الآن.
    - "الفيزياء الطبية" لطلاب السنة أولى في كلية الصيدلة عامى 2013 و 2014.
    - "الضوء الفيزيائي" للطلاب المتميزين سنة ثانية برنامج الليزر منذ عام 2015 وحتى 2018.
      - "الضوء الهندسي" للطلاب المتميزين سنة أولى برنامج الليزر عامي 2016 و 2017.
        - "فيزياء طبية" لطلاب السنة الأولى طب بشري في جامعة شام الخاصة 2017.
        - "ميكانيك 1" لطلاب السنة الثانية رياضيات جامعة دمشق فرع السويداء 2018.

## ب- المرحلة الدراسات العليا:

- "الإلكترونيات الضوئية" لطلاب ماجستير الفيزياء 2008 2012.
- "الضوئيات المتقدمة" و"الضوئيات اللخطية والنبضات الغاية في القصر" لطلاب الماجستير بالمعهد العالى لليزر 2012.

## 2- الأبحاث المنشورة:

- [1] F. Z. Qamar, T. A. King "Self-mode-locking effects in heavily doped single -clad Tm<sup>3+</sup>-doped silica fibre lasers", J. of Mod. Opt., 52 (8), 1053 1063, 2005.
- [2] F. Z. Qamar, T. A. King "Self-induced pulsations, Q-switching and mode-locking in Tm<sup>3+</sup>-silica fibre lasers", J. of Mod. Opt., 52(7), 1031 1043, 2005.

- [3] F. Z. Qamar, T. A. King, "Passive Q-switching of the Tm<sup>3+</sup>-silica fibre laser near 2 μm by a Cr<sup>2+</sup>: ZnSe saturable absorber crystal", Opt. Comm., 248, 501 508, 2005.
- [4] F. Z. Qamar, T. A. King, S. D. Jackson and Yuen. H. Tsang, "Holmium, praseodymium doped-fluoride fibre laser operating near 2.87 μm and pumped with a Nd: YAG laser", J. Lightwave. Tech., 23(12), 4315 4320, 2005.
- [5] F. Z. Qamar, A. King "Self pulsations and self Q-switching in Ho<sup>3+</sup>, Pr<sup>3+</sup>: ZBLAN fibre lasers at 2.87 μm "Appl. Phys. B, 81, 821 826, 2005.
- [6] Y. H Tsang, F. Qamar, T. A. King, Do-K. Ko, J. Lee, "Nanosecond Q-switched operation of coupled Yb and Tm fibre lasers", J. Phys. D: Appl. Phys. 38 1365 1370, 2005.
- [7] F. Z. Qamar, T. A. King, "Short pulse, high peak power Q-switched Tm<sup>3+</sup>-silica fibre laser at 1.9 μm", Optics and Laser Technology, 38, 1 7, 2006.
- [8] C. G. Fortuna, C. Bonaccorso, F. Qamar, A. Anu, I. Ledouxb and G. Musumarraa, "Synthesis and NLO properties of new trans 2-(thiophen-2-yl)vinyl heteroaromatic iodides", Org. Biomol. Chem., 9, 1608 1613, 2011.
- [9] F. Al-feel, F. Awad, I Alghoraibi and F. Qamar, "Using AFM to Determine the Porosity in Porous Silicon", Journal of Materials Science and Engineering A, Vol. 2 (9), 579 583, 2012.
- [10] F. Al-feel, F. Awad, and F. Qamar, "Changes of thermal Conductivity, Optical Conductivity, and Electric Conductivity of Porous Silicon With Porosity", Journal of New Technology and Materials (JNTM), Vol. 03, No. 01, pp. 56 60, 2013.
- [11] F. Z. Qamar, "Second Harmonic Hyper Rayleigh Light Scattering (HRS) in organic materials", Damascus Damascus University Journal for Basic Sciences ISSN 1726 5487, Vol. 29, No1, pp. 49 62 e, 2013.
- [12] F. Z. Qamar, "80 MHz Self starting passively mode-locked Erbium-Doped Fiber Laser via nonlinear polarization rotation with SESAM", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Vol. 29, No1, pp. 62 - 75e, 2013.
- [13] F. Al-feel, F. Awad, and F. Qamar, "Tuneable Optical properties of Porous Silicon", Damascus University Journal for Basic Sciences ISSN 1726 5487, Vol. 30, No2, pp. 41 51, 2014.
- [14] F. Alfeel, F. Awad, and F. Qamar, "Determination of porous silicon thermal conductivity using the "Mirage effect" method", International Journal of Nano Dimension, Vol. 5, Issue 3, pp. 267 272, 2014.
- [15] F. Alfeel, F. Awad, I. Alghoraibi and F. Qamar, "Change of diffused and scattered light with surface roughness of p-type porous silicon", International Journal of Nano Dimension, Vol. 5, Issue 4, pp. 415 - 419, 2014.

- [16] Q. Ommeish, and F. Qamar, "Optical properties investigation of organic compound 2-Nitroaniline", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Vol. 32, No2, pp. 41 - 51, 2015.
- [17] F. Z. Qamar, "Tuneable Harmonics Generation From Low Average Power Mode-Locked Er Fibre Laser Using Periodic Poling Nonlinear Crystals", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Accepted.
- [18] F. Z. Qamar, "Self-Induce Passive Q-Switching for Near and Mid IR Fiber Lasers Via Nonlinear Polarization Rotation", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, accepted.
- [19] F. Z. Qamar, "Hyper-polarisability Investigation of Some Organic Nanostructures Components in Solution", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Accepted.
- [20] F. Z. Qamar, "10 Hz Mode-locked Er Fibre Laser Using LiNBO4 Mach-Zehnder electro optics intensity modulator", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Accepted.
- [21] F. Z. Qamar, "Multi-Operational Tuneable Er Fibre Laser Based on Non-Linear Polarization Rotation Controlled by Four Wave Plates", Laser Phys. 28, pp. 6, 2018.

## 3- الكتب التي ألفها أو شارك في تأليفها:

كتاب "الضوء الفيزيائي" لطلاب السنة الثالثة في قسم الفيزياء منشورات جامعة دمشق 2012.

4- المنظمات والهيئات التي يشارك فيها: باحث اعتيادي في مركز عبد السلام للفيزياء النظرية، تربستا إبطالباً 2011 - 2015.

## 5- المؤتمرات العلمية التي شارك فيها:

- ➤ Workshop on ultra high short pulse lasers diagnostics, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 30<sup>th</sup> Oct-10<sup>th</sup> Nov. 2000.
- ➤ Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 18-20<sup>th</sup> Dec 2000.
- ➤ F. Z. Qamar, K. W. D. Ledingham, "Ultra high power lasers for proton beams generation" Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 17-19<sup>th</sup> Dec 2001.

- ➤ Workshop on ultra high field laser physics, Oxford, 11-12 April 2002.
- ➤ F. Z. Qamar, T. A. King, "High performance pulsed Tm<sup>3+</sup>-doped silica fibre laser: Self mode-locking and Q-switching" Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 15-17<sup>th</sup> Dec 2003.
- ➤ F. Z. Qamar, T. A. King, "Self-mode-locking and pulsed operation of Tm<sup>3+</sup>-silica fibre laser", Photon04, Institute of Physics IOP, Glasgow Caledonian University, 6-9<sup>th</sup> Sep., 2004.
- ➤ F. Z. Qamar, T. A. King, "Ultra short pulse measurement and high intensity lasers diagnostics", Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 15-17<sup>th</sup> Dec 2004.
- F. Z. Qamar, T. A. King, "Spectral and dynamic characteristics of holmium, praseodymium-fluoride fibre laser at 2.87 μm", Postgraduate Research Conference in Electronics, Photonics, Communications and Networks, and Computing Science, PREP 2005, Lancaster University, 30<sup>th</sup> -1<sup>st</sup> April 2005,
- F. Z. Qamar, T. A. King, "Holmium, praseodymium-fluoride fibre laser at 2.85-2.87 μm: continuous-wave and pulsed operation with1064 nm pumping" Physics a century after Einstein, Institute of Physics IOP, University of Warwick, UK, 10<sup>th</sup> -14<sup>th</sup> April 2005.
- ➤ Organizing first students Education day in Faculty of science in Nanotechnology, Damascus University, Syria 17<sup>th</sup> April 2008.
- ➤ F. Z. Qamar, "different designs of fiber laser" workshop in electronics and laser, Techreen University, Latakia, Syria 25 27 of May 2008.
- ➤ Winter College on Optics in Environmental Science, ICTP-Trieste-Italy, 26 Jan - 18 Feb. 2009.
- ➤ Summer school for Erasmus Mundus Master degree at "Molecular nano- and bio-photonics for telecommunications and biotechnologies" and researching at institute of Cachan France, 16<sup>th</sup> of June end of September.
- Summer College on Optics singularity, ICTP-Trieste-Italy, 30 May -03 June 2011.

6- مهمات البحث العلمي: لا يوجد.

7- المنح العلمية:

<sup>-</sup> Regular associate at ICTP -Trieste-Italy, 2010 - 2015.

- Scholarship from European Union to do research and teach at "Molecular nano- and bio-photonics for telecommunications and biotechnologies (MONABIPHOT)" Erasmus Mundus Master course, 2009.
- Scholarship from KFAS (Kuwait foundation for advance research) to attended Winter College on Optics in Environmental Science, ICTP-Trieste-Italy, 2009.
- Scholarship from Damascus Uni. for PhD degree in UK, 1999.
- Chevining Scholarship from British Education Council for master degree, 1999.

### 8- الدورات التدريبية المتبعة:

- فترة تدربية لمدة ستة أشهر في معهد رذرفورد بريطانيا 2001.
  - دورة عن الضوئيات والبيئة معهد عبد السلام 2009.
- دورة وورشة عمل عن وضع منهجية لامتحانات قبول مؤتمتة بأشراف باحثين من جامعة كمبردج بريطانيا ضمن برنامج تطوير قطاع التعليم العالى 2010 2011.
  - 9- التقارير لعلمية: لا يوجد.
  - 10- التقارير العلمية القصيرة: لا يوجد.
    - 11- الخبرات الأخرى: لا يوجد.



(أ. م. د. فادي قمر، قسم الفيزياء كلية العلوم، جامعة دمشق، اختصاص الكترونيات ضوئية وتكنولوجيا الليزر)

# Personal information:

*Title* : Dr. (Associate Professor)

Name & Surname : Fadi Qamar

Place & Date of Birth: Damascus, 1974

<u>Sex</u> : Male

<u>Marital Status</u>: Single

<u>Nationality</u> : Syrian

**Contact** 

Work address : Syria, Damascus, Damascus University Faculty

of Science, Dep. of Physics

Permanent address: Syria, Damascus, Khalid Ben alweleed St,

Alfarouk, no 15, 2ed floor no 6.

<u>E-mail</u>: <u>fadiqamar@hotmail.com</u>

**Mobile No.** : 00963 969872437

<u>Languages:</u>

<u>Arabic</u>: Mother Tongue.

*English* : Very Good (Writing, Reading, &Speaking).

**Qualifications:** 

Certificates: - Ph. D. in Laser Technology / A grad / Jul. 2005.

- M. Sc. in Optoelectronics & Laser Devices /

Oct. 2000.

- Diploma in Modern Physics / top student /

Oct.1996.

- B. Sc. License in General Physics / top student

/Jun1995.

#### Institutions:

- Manchester University, UK (Ph. D).
  - Heriot-Watt & St. Andrews Universities, UK

(M. Sc.).

- Damascus University, Syria (Diploma + B. Sc).

#### Prize/award/grants:

- Regular associate at ICTP -Trieste-Italy, 2010 2015.
- Scholarship from European Union to do research and teach at "Molecular nano- and bio-photonics for telecommunications and biotechnologies (MONABIPHOT)" Erasmus Mundus Master course, 2009.
- Scholarship from KFAS (Kuwait foundation for advance research) to attended Winter College on Optics in Environmental Science, ICTP-Trieste-Italy, 2009.
  - Scholarship from Damascus University for PhD degree in UK, 1999.
- Chevining Scholarship from British Education Council for master degree, 1999.
- Bassel awards and certificates for top student in seconds, third and forth

undergraduate years, 1993, 1994, 1995.

## Skills:

#### Computer literacy

: Extensive experience with Office, all window operating systems, and internet.

ICDL licenses 2008 (English – rate 93%).

## Work Experience:

**Post**: Teaching and researching.

*Employer* : Damascus University.

**<u>Length of service</u>** : 1997 to the present.

<u>Scientific experiences</u>: - Full time lab demonstrator at Damascus University, 1996-1997.

- Three months at THz company/Scotland (Msc project "Hybrid laser"), summer 2000.

- 5 months Rutherford Appilton Lab/ Oxford- UK (Short pulse measurements

and developing auto-correlators), summer 2001.

- Part time lab demonstrator at Manchester Uni.,

2001 - 2005.

- Full time lab demonstrator and researcher at Dep. of Physics/ Damascus University, 2005 up to now.
- Organizer of Laser labs at High Institute of Laser for research and application, 2005 2006.
  - 3 months at ENS Cachen / Paris/France (study scattering from nano-organic molecules), summer 2009.
  - 2 months and half at Elletra Synchrotron / Trieste/ Italy (setting up passive modelocking Er fiber laser experiment), summer 2011.
  - 2 months and half at Elletra Synchrotron/ Trieste/ Italy (Selecting pulse of mode-locked Er fiber lasers by Mach-Zender modulators and producing second, third and forth harmonic generation using non-linear crystals), Summer 2015.

# <u>Lecturing subjects</u>: since 2005.

- 'Optical Physics' for 3<sup>rd</sup> year physics students
- 'English' for 4<sup>th</sup> year physics students for academic years of 2005, 2008 2010.
- 'English' for and 2ed year physics students for academic year of 2006.
- 'The history of physics' for 4<sup>th</sup> year students, 2006.
- 'Laser Physics' for 4<sup>th</sup> year physics students since 2008.
- 'Optoelectronics' for physics master students 2008 2012
- 'General Physics' for 1<sup>st</sup> year chemistry students, 2008.
- 'Medical Physics' for 1<sup>st</sup> year Feeding students, 2008, (Kalmoon Private University, Syria).
- 'Medical Physics' for 1<sup>st</sup> year dentist students, 2008, (Kalmoon Private University, Syria).
- 'Advance optics', 'Nonlinear and ultra-short pulse optics' for master students of High Institute of Laser 2012.
- 'Environmental problems' for 3<sup>rd</sup> Environment students 2012 up to now.
- 'Environmental quality systems' for 4<sup>th</sup> Environ. students 2013 up to now.
- 'Medical Physics' for 1<sup>st</sup> year pharmacy students, 2013 up to now.
- 'Optical Physics' for 2<sup>nd</sup> year distinguished students laser programs since

2015 up to now.

- 'Geometrical Optics' for 1<sup>st</sup> year distinguished students, laser program

since 2016 up to now.

- 'Medical Physics' for 1<sup>st</sup> year medical students, 2017, (Sham Private University, Syria).
- 'Mechanics 1 for 2<sup>ed</sup> year math students, 2018, (Damascus University, Al-Swaida, Syria).

#### Physics Projects Supervisions:

**Degree/Institution:** Diploma students at High Institute of laser.

**Topics** - Designing Different diffraction gratings. Feedback distributed Dye lasers.

- Different operation of Nd-YAG laser systems.

Laser surgery in dentistry.

- Optical fiber in communications. Develop some nano - particles solutions.

- Application of laser in medical physics.

Application of laser in dentistry.

- Treating tooth roots and gum diseases with

laser.

**Degree/Institution:** Master at Dep. Of Physics - Faculty of

Science, Tishreen Uni.

**Topic** : Using Pulsed Lasers In Treating Skin

Problems (Artificial and Natural

Skin Colour Changes, and Lipoma).

**Degree/Institution:** Master at Dep. Of Physics - Faculty of

Science, Damascus Uni.

**Topics** : - Study of optical properties of CdSe nano particles near

the absorption edge (Sep 2014).

- Optical properties Study of some organic

components (Jan. 2016).

**Degree/Institution:** PhD at Dep. Of Physics - Faculty of Science,

Damascus University.

**Topic** : Optical properties of Porous Silicon (Jan

2014).

#### **Environments Projects Supervisions:**

#### Third year projects:

- [1] Bio-plastic (2013).
- [2] Green chemistry (2013).
- [3] Nano-tech. in criterion (2013).
- [4] Construction & destruction waste treatments (2013).
- [5] Vision pollutions (2014).
- [6] Environmental education (2014).
- [7] Sonic noise pollution (2015).
- [8] Environmental awareness (2015).
- [9] Organic pollutant components: PCBs (2015).
- [10] Health and psychological effects of crisis and wars (2015).
- [11] Plants blast combating via physical and chemical methods (2015).
- [12] Medical waste of hospitals and medical centers (realty & suggestions) (2015).
- [13] Environmental qualities improvement for microbiological laboratories (2015).
- [14] Designing environmental games (2016).
- [15] Environmental media (2016).
- [16] The roles of the environmentalists in various ministries (2017).
- [17] Solar Ponds (2018).
- [18] Employment of visual arts in the service of environmental issues (2018).

## **Graduation projects:**

- [1] Lighting and optical pollutions (2014).
- [2] The instruction of teaching environmental education in schools (2015).
- [3] Fundamental of environmental inspections for press environment (2016).
- [4] Fundamental of environmental inspections for educational environment (2016).
- [5] Family from an environmental perspective (2017).
- [6] Guide to sustainable environmental practices (2017).
- [7] Environmental inspections for dye-works environment (2017).

**Positions:** - Head of automation office at Faculty of Science (2006 - 2008).

- Activities moderator at the Faculty of Science (2006 -

2015).

- Member of scientific research community at Science

Faculty; Department of

Physics representative (2011 - 2013).

- Head of the monitoring commission at Faculty of the science (2011 - 2016).

#### **Coordinations:**

Science (2006 - 2015).

- Coordinator of scientific & culture week at Faculty of
- Faculty of Science Coordinator with Damascus University automation section

(2006 - 2015).

- Faculty of Science Coordinator with carrier training center at Damascus

University (2011 - 2015).

- Faculty of Science Coordinator with intentional affairs section at Damascus

University (2011 - 2015).

- Coordinator of new project (introduction to business word) for final year

science students (2012 - 2013).

#### Workshops, Conferences and Meetings

- ➤ Workshop on ultra high short pulse lasers diagnostics, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 30<sup>th</sup> Oct-10<sup>th</sup> Nov. 2000.
- ➤ Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 18-20<sup>th</sup> Dec 2000.
- ➤ F. Z. Qamar, K. W. D. Ledingham, "Ultra high power lasers for proton beams generation" Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 17-19<sup>th</sup> Dec 2001.
- ➤ Workshop on ultra high field laser physics, Oxford, 11-12 April 2002.
- ➤ F. Z. Qamar, T. A. King, "High performance pulsed Tm<sup>3+</sup>-doped silica fibre laser: Self mode-locking and Q-switching" Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 15-17<sup>th</sup> Dec 2003.
- ➤ F. Z. Qamar, T. A. King, "Self-mode-locking and pulsed operation of Tm<sup>3+</sup>-silica fibre laser", Photon04, Institute of Physics IOP, Glasgow Caledonian University, 6-9<sup>th</sup> Sep., 2004.

- ➤ F. Z. Qamar, T. A. King, "Ultra short pulse measurement and high intensity lasers diagnostics", Christmas meeting of high power laser science community, Central Laser Facility, CCLRC Rutherford Appleton Laboratory, Oxford, 15-17<sup>th</sup> Dec 2004.
- F. Z. Qamar, T. A. King, "Spectral and dynamic characteristics of holmium, praseodymium-fluoride fibre laser at 2.87 μm", Postgraduate Research Conference in Electronics, Photonics, Communications and Networks, and Computing Science, PREP 2005, Lancaster University, 30<sup>th</sup> -1<sup>st</sup> April 2005.
- F. Z. Qamar, T. A. King, "Holmium, praseodymium-fluoride fibre laser at 2.85-2.87 μm: continuous-wave and pulsed operation with1064 nm pumping" Physics a century after Einstein, Institute of Physics IOP, University of Warwick, UK, 10<sup>th</sup> -14<sup>th</sup> April 2005.
- ➤ Organizing first students Education day in Faculty of science in Nanotechnology, Damascus University, Syria 17<sup>th</sup> April 2008.
- ➤ F. Z. Qamar, "different designs of fiber laser" workshop in electronics and laser, Techreen University, Latakia, Syria 25 27 of May 2008.
- ➤ Winter College on Optics in Environmental Science, ICTP-Trieste-Italy, 26 Jan 18 Feb. 2009.
- ➤ Summer school for Erasmus Mundus Master degree at "Molecular nano- and bio-photonics for telecommunications and biotechnologies" and researching at institute of Cachan France, 16<sup>th</sup> of June end of September.
- Summer College on Optics singularity, ICTP-Trieste-Italy, 30 May 03 June 2011.

## **Publications:**

- [22] F. Z. Qamar, T. A. King "Self-mode-locking effects in heavily doped single clad Tm<sup>3+</sup>-doped silica fibre lasers", J. of Mod. Opt., 52 (8), 1053 1063, 2005.
- [23] F. Z. Qamar, T. A. King "Self-induced pulsations, Q-switching and mode-locking in Tm<sup>3+</sup>-silica fibre lasers", J. of Mod. Opt., 52(7), 1031 1043, 2005.
- [24] F. Z. Qamar, T. A. King, "Passive Q-switching of the  $Tm^{3+}$ -silica fibre laser near 2  $\mu m$  by a  $Cr^{2+}$ : ZnSe saturable absorber crystal", Opt. Comm., 248, 501 508, 2005.
- [25] F. Z. Qamar, T. A. King, S. D. Jackson and Yuen. H. Tsang, "Holmium, praseodymium doped-fluoride fibre laser operating near 2.87 μm and pumped with a Nd: YAG laser", J. Lightwave. Tech., 23(12), 4315 4320, 2005.

- [26] F. Z. Qamar, A. King "Self pulsations and self Q-switching in Ho<sup>3+</sup>, Pr<sup>3+</sup>: ZBLAN fibre lasers at 2.87 μm "Appl. Phys. B, 81, 821 826, 2005.
- [27] Y. H Tsang, F. Qamar, T. A. King, Do-K. Ko, J. Lee, "Nanosecond Q-switched operation of coupled Yb and Tm fibre lasers", J. Phys. D: Appl. Phys. 38 1365 1370, 2005.
- [28] F. Z. Qamar, T. A. King, "Short pulse, high peak power Q-switched Tm<sup>3+</sup>-silica fibre laser at 1.9 μm", Optics and Laser Technology, 38, 1 7, 2006.
- [29] C. G. Fortuna, C. Bonaccorso, F. Qamar, A. Anu, I. Ledouxb and G. Musumarraa, "Synthesis and NLO properties of new trans 2-(thiophen-2-yl)vinyl heteroaromatic iodides", Org. Biomol. Chem., 9, 1608 1613, 2011.
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- [44] F. Z. Qamar, "Physics Publications in the Journal of Damascus University: History, Facts and Continuity", Damascus University Journal for Basic Sciences ISSN - 1726 - 5487, Submitted.

## Books:

- [1] Physical optics for third year physics student / Faculty of Science / Damascus University, 2012.
- [2] Physical optics and laser experimental book for third year physics student / Faculty of Science / Damascus University, to be print.
- [3] Laser physics and its applications for forth year physics student / Faculty of Science / Damascus University, to be print.

## **Sports and hobbies:**

Football, basketball, jogging, swimming, music, writing poems, and organizing trips & activities.

## Stays abroad

Sep / 1999 - Aug / 2005 UK (MSc, and PhD Dgree)

Feb 2009 ICTP, Trieste, Italy (attending optics in environments workshop).

Jun - Sep 2009 École normale supérieure de Cachan, Paris, France (doing research).

Jun - Aug 2011 Elettra synchrotron, Trieste, Italy (doing research: regular associate).

Jul - Sep 2015 Elettra synchrotron, Trieste, Italy (doing research: regular associate).

## Research Plan and Future Gaols

I am interested to work in the area of optics and laser with their various applications in many fields such as in: nano-technology, in biology, in medicine, and in industry. I did a research in 2009 at in ENS Cachan (Paris / France) about producing a second harmonic generation from organic solution for medical purposes and did a research in 2011 at Elettra Synchrotron - Trieste - Italy as a regular associate, the research was about self-starting passively mode-locked Erbium-Doped fiber laser via nonlinear polarization rotation and via SESAM as well as to generate nonlinear harmonic (SHG, THG, FHG) and using Mach-Zender optical modulator to obtain low rate train mode-locked pulse. Also, I supervised master and PhD students collaborating with other doctors, they did their researches in the area of laser, holography, nanotechnology, and optical properties for some organic materials. I believe that my wide background in physical & nonlinear optics, optoelectronics devices, lasers and nanotechnology will help me to participate in some researches in these areas.

## Statement of Teaching Philosophy

Teaching for me is very important, I believe that I can learn from my student exactly as they learn from me, by mentoring students and contribute to their intellectual growth, I can gain new perspectives on many topics especially in my occupied research area and increase my knowledge in wide scientific fields. In the lecture I always try to bring a lot of energy to my class. I try to transfer my practical experience and relating the science and its application to use in our day live, making the lecture exciting and trying to use the interactive learning method instead of the old fashioned ways of teaching, at the end of the lecture I try to exam if the student really understand the foundational concepts in the field, and even the sophisticate information by asking questions.

My office is always open for students that needs any help and assistant, whether in their studies or in solving their own problems, or even for whom they wish to fine anyone who can support their potential scientific and help to achieve their projects, however I currently volunteered to be as a supervisor for the student activities to support the talents and creativity of students, I has started, eight years ago, in the Faculty of Science, what so-called scientific and culture week for faculty students of

which highlights on the scientific, literary, and artistic talents of students and encourages the students to interact with members of the teaching staff. I believe that if we want to get the most of our student we must take care of the own affairs and activities.

Finally, I believe that exams is not just for discovering whether students understand the subject or not but its additional way to improve his knowledge and point out on the weakest area that they should work more out. I usually write my exam questions carefully to discover whether the student deeply understand the course or just kept the information by heart. Also, I consider labs is another way to exam the ability of students on applying the information they learn in real leave therefore I give a lot of concern for lab works and usually, at summer vacation time, I look for outstanding distinguishable students to create groups to do more practices and scientific activities.