

# Publications

## 2018:

- Sanjuan, J., Alqudah, M. 2018. **Charophyte flora from Miocene deposits of Zahle (Beeka Valley, Lebanon)**. Biostratigraphic, Palaeoenvironmental and Palaeobiogeographical implications. *Geodiversitas* 40 (10): 195-209.
- Fratzczak, E. Z.; Makowski, T.; Moustafa, R. M.; El-Assaad, T. H.; Moneta, M. E.; Uznanski, P.\*; Kaafarani, B. R.\* **“Spectroscopic Characterization of Structural Properties of Quinoxalinophenanthrophenazines Thin Films”** *J. Mater. Chem. C* **2018**, 6, 781-789.
- Saad Omais, Carine Jaafar and **Noël Ghanem\*** Till Death Do Us Part: A Potential Irreversible Link Between Aberrant Cell Cycle Control and Neurodegeneration in the Adult Olfactory Bulb. co-first authors. *Front. Neurosci.* **2018**, *12:144*. doi: **10.3389/fnins.2018.00144**
- Kazem Zibara<sup>1</sup>, Nissrine Ballout<sup>1</sup>, Nabil Karnib<sup>4</sup>, Naify Ramadans, Saad Omais, Ali Nabbouh, Daniela Caliz, Angelica Clavijo, Zhen Hu, **Noël Ghanem**, Shyam Gajavelli, \* and Firas Kobeissy Combination of Drug and Stem cells Neurotherapy: Potential Interventions in Neurotrauma and Traumatic Brain Injury. *Submitted*

## 2017:

- Alqudah, M., Hakimi, M., Abdullah, W., Ali Hussein, M., Masri, A., Mutterlose, J., 2017. **Calcareous nannofossil biostratigraphy of the Cenomanian - Turonian interval (Cretaceous) from Jordan**. Journal of Nannoplankton Research, v. 37, Special issue, p. 21.
- Alqudah, M., Khoury, K., Salameh, E., Mutterlose J., 2017. **An unconventional application of calcareous nannofossils – reconstructing the timing and the course of an Eocene meteorite impact in central Jordan**. Journal of Nannoplankton Research, v. 37, Special issue, p. 22.
- **Hayar, B.**, El-Houjeiri, L., Saad, W., Aouad, P., Tawil, N., Abdel-Samad, R., Hleihel, R., Hamie, M., Mancinelli, A., Pisano, C., El Hajj, H. and \*Darwiche, N. **Antitumor effect of the atypical retinoid ST1926 in acute myeloid leukemia and nanoparticle formulation prolongs lifespan and reduces tumor burden of xenograft mice**. *Molecular Cancer Therapeutics*. 16(10):2047-2057, 2017.

- H. Ibrahim, H. Farah, A. Zein Eddin, S. Isber and R. Sultan, "**Ag Fractal Structures in Electroless Metal Deposition Systems With and Without Magnetic Field**", 2017, *Chaos* 2017, 27, 083111.
- Abou Matar, T. and Karam, P., "**The Role of Hydrophobicity in the Cellular Uptake of Negatively Charged Macromolecules**", *Macromol. Biosci.*, 2017
- Antitumor activities of the synthetic retinoid ST1926 in two-dimensional and three-dimensional human breast cancer models Patrick Aouada,b, Melody Saikalib , Rana Abdel-Samadb , Sabreen Fostoka , Leeanna El-Houjeirib , Claudio Pisanoc , Rabih Talhouka and Nadine Darwiche. *Anticancer Drugs*. 2017 May 3. doi: 10.1097
- **Damage-Induced Cell Regeneration in the Midgut of Aedes albopictus Mosquitoes** Maria Janeh, Dani Osman & Zakaria Kambris. *Scientific Reports* | 7:44594 | DOI: 10.1038/srep44594 2, 2017
- G. Al Makdessi and M. Tabbal, "Investigation of the expansion of an oxygen microwave remote plasma for the growth of functional oxide thin films" *Plasma Chem. Plasma Proc.* **37**, 243–255 (2017).
- Alqudah, M., Hakimi, M., Abdullah, W., Ali Hussein, M., Masri, A., Mutterlose, J., 2017. **Calcareous nannofossil biostratigraphy of the Cenomanian - Turonian interval (Cretaceous) from Jordan.** *Journal of Nannoplankton Research*, v. 37, Special issue, p. 21. SEM was used.
- Alqudah, M., Khoury, K., Salameh, E., Mutterlose J., 2017. **An unconventional application of calcareous nannofossils – reconstructing the timing and the course of an Eocene meteorite impact in central Jordan.** *Journal of Nannoplankton Research*, v. 37, Special issue, p. 22.
- H. Ibrahim, H. Farah, A. Zein Eddin, S. Isber and R. Sultan, "Ag Fractal Structures in Electroless Metal Deposition Systems With and Without Magnetic Field", 2017, *Chaos* **2017**, 27, 083111.

## **2016:**

- **Role of Rb during Neurogenesis and Axonal Guidance in the Developing Olfactory System.** Carine Jaafar, Saad Omais, Sawsan Al Lafi, Nadim El Jamal, Mohammad

Noubani, Larissa Skaf and Noël Ghanem\* .ORIGINAL RESEARCH published: 09 September 2016 doi: 10.3389/fnmol.2016.00081

- Renaud Vandenbosch, Alysén Clark, Bensun C. Fong, Saad Omais, Carine Jaafar, Delphie Dugal-Tessier, Jagroop Dhaliwal, Diane C. Lagace, David S. Park, Noël Ghanem\* and Ruth S. Slack\* \*Co-corresponding authors. **RB regulates the production and the survival of newborn neurons in the embryonic and adult dentate gyrus', Hippocampus**, DOI: 10.1002/hipo.22613 2016. IF: 4.162
- **Encapsulation of curcumin in cyclodextrin-metal organic frameworks: Dissociation of loaded CD-MOFs enhances stability of curcumin** Food Chemistry, doi:10.1016/j.foodchem.2016.06.013
- M. Abi-Akl, IM. Tabbal, W. Kassem, **Crystalline phase control and growth selectivity of  $\beta$ -MnO<sub>2</sub> thin films by remote plasma assisted pulsed laser deposition**, Thin Solid Films, Volume 612, 1 August 2016, Pages 450–455.
- Naim, S., Ghauch, A., (2016) **Ranitidine abatement in chemically activated persulfate systems: assessment of industrial iron waste for sustainable applications**. Chem. Eng. J. 288, 276-288
- **Uptake, delivery, and anticancer activity of thymoquinone nanoparticles in breast cancer cells**. Isabelle Fakhoury, Walid Saad, Kamal Bouhadir, Peter Nygren, Regine Schneider-Stock, Hala Gali-Muhtasib, J Nanopart Res (2016) 18: 210. doi:10.1007/s11051-016-3517-8
- Al Mohtar, W. Kassem, **M. Tabbal**, M. Roumie “**Formation of WO<sub>3</sub> by remote plasma assisted oxidation of tungsten thin films**” Surf. Coat. Technol., in press <http://dx.doi.org/10.1016/j.surfcoat.2016.09.046> (2016)
- Iskandar, A. Gwiazda, Y. Huang, M. Kazan, A. Bruyant, **M. Tabbal**, and G. Lerondel, “**Modification of the phonon spectrum of bulk Si through surface nanostructuring**”, J. Appl. Phys. **120**, 095106 (2016).
- **Role of the Retinoblastoma protein, Rb, during adult neurogenesis in the olfactory bulb**. Rayan Naser\*, Renaud Vandenbosch, Saad Omais, Dayana Hayek, Carine Jaafar, Sawsan Al Lafi, Afaf Saliba, Maarouf Baghdadi1, Larissa Skaf & Noël Ghanem. Scientific Reports | 6:20230 | DOI: 10.1038/srep20230

## 2015:

- DECEMBER 2015: Abdallah EY, Smith CA. 2015. **Diverse Mutants of HIV RRE IIB Recognize Wild-Type Rev ARM or Rev ARM R35G-N40V**. Journal of Molecular Recognition **28**, 710–721. doi: 10.1002/jmr.2485

- NOVEMBER 2015: Tawk CS, Ghattas IR, Smith CA. 2015. **HK022 Nun Requires Arginine-Rich Motif Residues Distinct from  $\lambda$  N.** *Journal of Bacteriology* **197**, 3573–3582 doi: 10.1128/JB.00466-15.
- **Turning the heat on conjugated polyelectrolytes: an off–on ratiometric nanothermometer** Ghinwa H. Darwish,<sup>a</sup> Ali Koubeissi,<sup>a</sup> Tharallah Shoker,<sup>a</sup> Samir Abou Shaheen<sup>a</sup> and Pierre Karam<sup>\*a</sup> Show Affiliations; *Chem. Commun.*, 2016,**52**, 823-826; 09 Nov 2015
- **Anti-Inflammatory and Cytostatic Activities of a Parthenolide-Like Sesquiterpene Lactone from *Cota palaestina* subsp. syriaca.** Talhouk RS, Nasr B, Fares MB, Ajeeb B, Nahhas R, Al Aaraj L, Talhouk SN, Ghaddar TH, Saliba NA. *Evid Based Complement Alternat Med.* 2015; 2015:474597. doi: 10.1155/2015/474597. Epub 2015 May 19.
- **Nanohybrid conjugated polyelectrolytes: highly photostable and ultrabright nanoparticles.** Ghinwa H. Darwish and Pierre Karam *Nanoscale*, 2015, **7**, 15149-15158

## 2014:

- **A Serine Protease Homolog Negatively Regulates TEP1 Consumption in Systemic Infections of the Malaria Vector *Anopheles gambiae*.** Yassine H, Kamareddine L, Chamat S, Christophides GK, Osta MA. *J Innate Immun.* 2014 Jul 8. [Epub ahead of print]
- Fatfat M, Abou Merhi R, Rahal O, Stoyanovsky DA, Zaki A, Haidar H, Kagan VE, Gali-Muhtasib H, Machaca K. **Copper chelation selectively kills colon cancer cells through redox cycling and generation of reactive oxygen species.** *BMC Cancer*, **BMC Cancer**, 2014,14:527. doi: 10.1186/1471-2407-14-527
- Jaafar, M., Baalbaki, R., Daher, N., Shihadeh A., Sioutas, C., Saliba, N.A., 2014. **Dust episodes and their effect on the redox activity of coarse and fine particles in an urban background site in an east Mediterranean city.** *Atmospheric Environment*, Accepted manuscript.
- Mai Mouslmani, Digambara Patra\*, **Revoking excited state intra-molecular hydrogen transfer by size dependent tailored made hierarchically ordered nanocapsules**, *RSC Advances*, 4, 8316 – 8320 (2014)
- Digambara Patra\*, Fatima Sleem, **Acridine orange and silica nanoparticles facilitated novel robust fluorescent hollowmicrocapsules towards DNA bio-sensor**, *Colloids and Surfaces A: Physicochem. Engg. Aspects*, 443, 320 – 325 (2014)
- Jaafar, M., Baalbaki, R., Daher, N., Shihadeh A., Sioutas, C., Saliba, N.A., 2014. **Dust episodes and their effect on the redox activity of coarse and fine particles in an urban**

**background site in an east Mediterranean city.** Atmospheric Environment, Accepted manuscript.

- Mai Mouslmani, Digambara Patra\*, **Revoking excited state intra-molecular hydrogen transfer by size dependent tailored made hierarchically ordered nanocapsules**, RSC Advances, 4, 8316 – 8320 (2014)
- Digambara Patra\*, Fatima Sleem, **Acridine orange and silica nanoparticles facilitated novel robust fluorescent hollowmicrocapsules towards DNA bio-sensor**, Colloids and Surfaces A: Physicochem. Engg. Aspects, 443, 320 – 325 (2014)

## **2013:**

- Dada, L., Mrad, R., Sifferet, S., Saliba, N.A., 2013. **Atmospheric markers of African and Arabian dust in an urban eastern Mediterranean environment**, Beirut, Lebanon. Journal of Aerosol Science, Accepted manuscript.
- Tohme, R., Al Aaraj, L., Ghaddar, T., Gali-Muhtasib, H., Saliba, N.A., Darwiche, N., 2013. **Differential Growth Inhibitory Effects of Highly Oxygenated Guaianolides Isolated from the Middle Eastern Indigenous Plant Achillea falcata in HCT-116 Colorectal Cancer Cells**. Molecules 18, 8275-8288.
- Ghauch et al., **Degradation of sulfamethoxazole by persulfate assisted micrometric Fe0 in aqueous solution**, Chem. Eng.J. (2013), <http://dx.doi.org/10.1016/j.cej.2013.05.045>
- Digambara Patra, Fatima Sleem, **A new method for pH triggered curcumin release by applying poly(l-lysine) mediated nanoparticle-congregation**. Analytica Chimica Acta. Volume 795, 17 September 2013, Pages 60–68
- Abrahamian, P.E., Abou-Jawdah, Y., 2013. **Detection and quantitation of the new world Squash leaf curl virus by TaqMan real-time PCR**. Journal of Virological Methods 191, 76-81
- **hydrogen underpotential deposition and electrochemical characterization**. Phys. Chem. Chem. Phys., 2013,15, 15223-15233
- N. Rahbany, M. Kazan, M. Tabbal, R. Tauk, J. Jabbour et al. **Measurement of the effect of plasmon gas oscillation on the dielectric properties of p- and n-doped Al<sub>x</sub>Ga<sub>1-x</sub>N films using infrared spectroscopy**. J. Appl. Phys. 114, 053505 (2013)
- Abrahamian, P.E., Abou-Jawdah, Y., 2013. **Detection and quantitation of the new world Squash leaf curl virus by TaqMan real-time PCR**. Journal of Virological Methods 191, 76-81

- Dada, L., Mrad, R., Sifferet, S., Saliba, N.A., 2013. **Atmospheric markers of African and Arabian dust in an urban eastern Mediterranean environment**, Beirut, Lebanon. Journal of Aerosol Science, Accepted manuscript.
- Tohme, R., Al Aaraj, L., Ghaddar, T., Gali-Muhtasib, H., Saliba, N.A., Darwiche, N., 2013. **Differential Growth Inhibitory Effects of Highly Oxygenated Guaianolides Isolated from the Middle Eastern Indigenous Plant Achillea falcata in HCT-116 Colorectal Cancer Cells**. Molecules 18, 8275-8288.
- Ghauch et al., **Degradation of sulfamethoxazole by persulfate assisted micrometric Fe<sup>0</sup> in aqueous solution**, Chem. Eng.J. (2013), <http://dx.doi.org/10.1016/j.cej.2013.05.045>
- Digambara Patra, Fatima Sleem, **a new method for pH triggered curcumin release by applying poly(L-lysine) mediated nanoparticle-congregation**. Analytica Chimica Acta. Volume 795, 17 September 2013, Pages 60–68
- Sarah Jaber, Pamela Nasr, Yan Xin, Fatima Sleem Lara I. Halaoui. **Assemblies of polyvinylpyrrolidone-capped tetrahedral and spherical Pt nanoparticles in polyelectrolytes: hydrogen underpotential deposition and electrochemical characterization**. Phys. Chem. Chem. Phys., 2013, 15, 15223-15233
- N. Rahbany, M. Kazan, M. Tabbal, R. Tauk, J. Jabbour et al. **Measurement of the effect of plasmon gas oscillation on the dielectric properties of p- and n-doped Al<sub>x</sub>Ga<sub>1-x</sub>N films using infrared spectroscopy**. J. Appl. Phys. 114, 053505 (2013)
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- Rita Tohme, Lamis Al Aaraj, Tarek Ghaddar, Hala Gali-Muhtasib, Najat A. Saliba, and Nadine Darwiche. **Differential Growth Inhibitory Effects of Highly Oxygenated Guaianolides Isolated from the Middle Eastern Indigenous Plant Achillea falcata in HCT-116 Colorectal Cancer Cells**. Molecules, accepted.

## 2012:

- Digambara Patra\*, Nagham N. Malaeb, **Fluorescence modulation of 1,7-bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione by silver nanoparticles and its possible analytical application**, Luminescence, 27, 11-15 (2012)
- Arlin Jose Amali, Shashi Singh, Nadini Rangaraj, Digambara Patra, Rohit Kumar Rana\*, **Poly(L-Lysine)-pyranine-3 coacervate mediated nanoparticle-assembly: fabrication of dynamic pH-responsive containers**, ChemComm, 48, 856 - 858 (2012)

- **Infrared analysis of the effect of Ge at the interface between 3C-SiC and Si**; M. Kazan, M. Tabbal, M. Masri; *Diamond and Related Materials*, Vol. 22, p. 23 (2012)
- **Model for the unpolarized infrared reflectivity from uniaxial polar materials: Effects of anisotropy, free carriers, and defects**; M. Shamseddine, M. Kazan, M. Tabbal; *Infrared Physics and Technology*, Vol. 55, p. 112 (2012)
- Digambara Patra\*, Christelle Barakat, **Time-resolved fluorescence study during denaturation and renaturation of curcumin-myoglobin complex**, *International Journal of Biological Macromolecules*, 50, 885 - 890 (2012)
- Digambara Patra\*, Elsy El Khoury, Diana Ahmadieh, Shaza Darwish, Rana M. Tafech, **Effect of curcumin on liposome: Curcumin as a molecular probe for monitoring interaction of ionic liquids with 1,2-dipalmitoyl-sn-glycero-3-phosphocholine liposome**, *Photochemistry and Photobiology*, **88**, 317 - 327 (2012)
- 3. Arlin Jose Amali, Shashi Singh, Nadini Rangaraj, Digambara Patra, Rohit Kumar Rana\*, **Poly(L-Lysine)-pyranine-3 coacervate mediated nanoparticle-assembly: fabrication of dynamic pH-responsive containers**, *ChemComm*, **48**, 856 - 858 (2012)
- Digambara Patra\*, Nagham N. Malaeb, **Fluorescence modulation of 1,7-bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione by silver nanoparticles and its possible analytical application**, *Luminescence*, **27**, 11-15 (2012)
- Patra, Digambara.; Malaeb, Nagham,N.; Haddadin, MakhluF. J.; Kurth, Mark.J.,” **Influence of substituent and solvent on the radiative process of singlet excited states of novel cyclic azacyanine derivatives** “, *J. Fluorescence*, 2012, 22 (2) ,707-717.
- **Acid and base catalyzed Davis-Beirut reaction: Experimental and theoretical mechanistic studies and synthesis of novel 3-amino-2H-indazoles**. Avila, Belem; El-Dakdouki, Mohammad, H.; Nazer, Musa Z.; Harrison, Jason, G.; Tantillo, Dean, J.; Haddadin, MakhluF, J.; Kurth, Mark. J. *Tetrahedron Letters*, 2012, 53 (48), 6475-6478.
- **The Davis-Beirut Reaction: A Novel Entry into 2H-indazoles and Indazolones**. Recent Biological Activity of Indazoles. MakhluF J. Haddadin, Wayne E. Conrad, Mark J. Kurth. *Mini-Reviews in Medicinal Chemistry*; Oct 2012, Volume 12, Issue 12, pp.1293-1300 (8)
- **Unusual Friedlander Reactions: A Route to Novel Quinoxaline-Based Heterocycles**. Tharallah A. Shoker, Khaled I. Ghattass, James C. Fettinger, Mark J. Kurth, and MakhluF J. Haddadin. *Org. Lett.*, 2012, 14 (14), pp 3704–3707
- **A One-Pot-Three-Step Route to Triazolotriazepinoindazolones from Oxazolino-2H-indazoles**. Conrad WE, Rodriguez KX, Nguyen HH, Fettinger JC, Haddadin MJ, Kurth MJ. *Org Lett*. 2012 Aug 3;14(15):3870-3. Epub 2012 Jul 23.

- **Thymoquinone induces apoptosis in malignant T-cells via generation of ROS.** Dergarabetian E, Ghattass K, El-Sitt S, Al Mismar R, El-Baba C, Itani W, Melhem N, El-Hajj H, Bazarbachi A, Schneider-Stock R, \*Gali-Muhtasib H. *Frontiers in Bioscience*, in press.
- **Infrared analysis of the effect of Ge at the interface between 3C-SiC and Si;** M. Kazan, M. Tabbal, M. Masri; *Diamond and Related Materials*, Vol. 22, p. 23 (2012)
- **Model for the unpolarized infrared reflectivity from uniaxial polar materials: Effects of anisotropy, free carriers, and defects;** M. Shamseddine, M. Kazan, M. Tabbal; *Infrared Physics and Technology*, Vol. 55, p. 112 (2012)
- Digambara Patra\*, Christelle Barakat, **Time-resolved fluorescence study during denaturation and renaturation of curcumin-myoglobin complex**, *International Journal of Biological Macromolecules*, 50, 885 - 890 (2012)
- Digambara Patra\*, Elsy El Khoury, Diana Ahmadih, Shaza Darwish, Rana M. Tafech, **Effect of curcumin on liposome: Curcumin as a molecular probe for monitoring interaction of ionic liquids with 1,2-dipalmitoyl-sn-glycero-3-phosphocholine liposome**, *Photochemistry and Photobiology*, 88, 317 - 327 (2012)
- Arlin Jose Amali, Shashi Singh, Nadini Rangaraj, Digambara Patra, Rohit Kumar Rana\*, **Poly(L-Lysine)-pyranine-3 coacervate mediated nanoparticle-assembly: fabrication of dynamic pH-responsive containers**, *ChemComm*, 48, 856 - 858 (2012)
- **Unusual Friedlander Reactions: A Route to Novel Quinoxaline-Based Heterocycles.** Tharallah A. Shoker, Khaled I. Ghattass, James C. Fettinger, Mark J. Kurth, and Makhluif J. Haddadin. *Org. Lett.*, 2012, 14 (14), pp 3704–3707
- **A One-Pot-Three-Step Route to Triazolotriazepinoindazolones from Oxazolono-2H-indazoles.** Conrad WE, Rodriguez KX, Nguyen HH, Fettinger JC, Haddadin MJ, Kurth MJ. *Org Lett.* 2012 Aug 3;14(15):3870-3. Epub 2012 Jul 23.
- Patra, Digambara.; Malaeb, Nagham,N.; Haddadin, Makhluif. J.; Kurth, Mark.J.,” **Influence of substituent and solvent on the radiative process of singlet excited states of novel cyclic azacyanine derivatives** “, *J. Fluorescence*, 2012, 22 ( 2) ,707-717.
- **Avila, Belem ;El-Dakdouki, Mohammad, H.; Nazer, Musa Z.; Harrison, Jason, G.; Tantillo, Dean, J.; Haddadin, Makhluif, J.; Kurth, Mark. J. Tetrahedron Letters, 2012, 53 (48), 6475-6478**
- Arlin Jose Amali, Shashi Singh, Nadini Rangaraj, **Digambara Patra**, Rohit Kumar Rana\*, **Poly(L-Lysine)-pyranine-3 coacervate mediated nanoparticle-assembly: fabrication of dynamic pH-responsive containers**, *ChemComm*, **48**, 856 - 858 (2012)
- Authors: L. Moubarak and G. Antar,



Title: **DYNAMICS OF A TWO-DIMENSIONAL FLOW SUBJECT TO STEADY ELECTROMAGNETIC FORCES**

## **2011:**

- Arlin Jose Amali, Nour H. Awwad, Rohit Kumar Rana\*, **Digambara Patra\***, **Nanoparticle Assembled Microcapsules for Application as pH and Ammonia Sensor**, *Analytica Chimica Acta*, **708**, 75 - 83 (2011)
- **Digambara Patra\***, Christelle Barakat, **Unique role of ionic liquid [bmin][BF<sub>4</sub>] during curcumin-surfactant association and micellization of cationic, anionic and non-ionic surfactant solutions**, *Spectrochimica Acta Part A*, **79**, 1823 - 1828 (2011)
- **Digambara Patra\***, Christelle Barakat, **Synchronous fluorescence spectroscopic study of solvatochromic curcumin dye**, *Spectrochimica Acta Part A*, **79**, 1034 - 1041 (2011)

## **2010:**

- **Article title:** Mercury removal from aqueous solutions using silica, polyacrylamide and hybrid silica-polyacrylamide aerogels.

Journal: Chemical Engineering Journal

Date: 2010

Authors: Hiba Ramadan, Aline Ghanem, Houssam El-Rassy

Department: Chemistry

Equipment used at the CRSL: BET, AAS, Optical Microscope

## **2009:**

- **Article Title: Effect of Chain Length on the Photophysical Properties of Pyrene-Based Molecules Substituted With Extended Chains**

Author: Degheili, J. A.; Moustafa, R. M.; Patra, D.; Kaafarani, B. R.

Journal: J. Phys. Chem

Date: January 2009

Department: Chemistry

Equipment Used at the CRSL: NMR Spectrometer, Fluorometer, Spectrometer

- **Article Title: Synthesis and Detailed Photophysical Studies of Pyrene-Based Molecules Substituted with Extended Chains**

Author: Moustafa, R. M.; Degheili, J. A.; Patra, D.; Kaafarani, B. R.

Journal: J. Phys. Chem

Date: January 2009

Department: Chemistry

- Fostok S., Ezzeddine, R.A., Homaidan F., Al-Saghir J., Salloum R., Saliba N.A. and Talhouk, R.S. (2009).

- **Interleukin-6 and Cyclooxygenase-2 downregulation by fatty-acid fractions of Ranunculus constantinopolitanus.** BMC Complementary and Alternative Medicine 9:44

- Talhouk, R.S., Esseili, M., Kogan, J. Atallah, M., Talhouk, S. and Homaidan F.R. (2009). **Inhibition of Endotoxin-Induced Pro-Inflammatory Markers by Water Extracts of Onopordum cynarocephalum and Achillea damascene.** Journal of Medicinal Plants Research 3:9:686-698.

- Al-Saghir J, Al-Ashi R, Salloum R, Saliba NA, Talhouk RS, and Homaidan FR. (2009) **Anti inflammatory Properties of Salograviolide A Purified from Lebanese Plant Centaurea ainetensis.** BMC Complementary and Alternative Medicine 9:36.

- Saliba, N.A., Dakdouki, S., Homeidan, F., Kogan, J., Bouhadir, K., Talhouk, S. and Talhouk, R. (2009) **Bio-guided fractionation, Isolation & structure identification of an anti-inflammatory guaianolids from Centaurea ainetensis.** Pharmaceutical Biology 47:701-707.

- Haykal J, Geara F, Haddadin M, Smith C, \*Gali-Muhtasib H. 2009. **The radiosensitizer 2-benzoyl-3-phenyl-6,7-dichloroquinoxaline 1,4-dioxide induces DNA damage in EMT-6 mammary carcinoma cells.** Radiation Oncology 4:25.

- **Article title: Cobalt Ferrite Aerogels by Epoxide Sol-Gel Addition: Efficient Catalysts for the Hydrolysis of 4-Nitrophenyl Phosphate.**

Journal: Journal of Molecular Catalysis A: Chemical

Date: 2009

Authors: Joelle Akl, Tarek Ghaddar, Aline Ghanem, Houssam El-Rassy

Department: Chemistry

Equipment used at the CRSL: XRD, BET, HPLC-UV

- **Article title: Adsorption Kinetics and Thermodynamics of Azo-Dye Orange II onto Highly Porous Titania Aerogel.**

Journal: Chemical Engineering Journal

Date: 2009

Authors: Lara Abramian, Houssam El-Rassy

Department: Chemistry

Equipment used at the CRSL: BET, UV-Vis

- **Article Title: Antibiotic removal from water: Elimination of amoxicillin and ampicillin by microscale and nanoscale iron particles**

Author: Antoine Ghauch, Almuthanna Tuqan, Hala Abou Assi

Journal: Environmental Pollution

Date: January 2009

Department: Chemistry

Equipment Used at the CRSL: HPLC, LC MS, Spectrophotometer.

## 2008

- Talhouk, R.S., Mroue, R.M., Mokalled, M, Abi-Mosleh, L, Nehme, R, Ismail, A, Zaatari, M., Khalil, A., El-Sabban M.E. (2008). **Heterocellular Interaction Enhances Recruitment of  $\alpha$  and  $\beta$ -Catenins and ZO-2 into Functional Gap Junction Complexes and Gap Junction-dependant Differentiation of Mammary Epithelial Cells.** Experimental Cell Research 314:3275-91.
- Talhouk, R.S., El-Jouni, W., Kogan, J. Baalbaki, R., Mohtaseb, H., Talhouk, S., and Barbour, E.K. (2008).
- Itani W, El-Banna S, Hassan S, Larsson R, Bazarbachi A, \*Gali-Muhtasib H. 2008. **Anti-Colon-Cancer Components from Lebanese Sage (*Salvia libanotica*) Essential Oil: Mechanistic Basis.** Cancer Biology and Therapy, 7(11):1765-73.
- El-Najjar N, Dakdouki S, Darwiche N, El-Sabban M, Saliba N and \*Gali-Muhtasib H. 2008. **Anti-colon cancer effects of Salograviolide A isolated from *Centaurea ainetensis*.** Oncology Reports,19(4):897-904.

## 2007

- Patrick Saoud, Sawsan Kreydiyyeh, Tony Shalfoun and Mazen Fakh. (2007). **Influence of salinity on survival, growth, plasma osmolality and gill  $\text{Na}^+$ - $\text{K}^+$ -ATPase activity in the rabbitfish *Siganus rivulatus*.** Journal of Experimental Marine Biology and Ecology 384: 183-190.
- El-Najjar N, Saliba N, Talhouk S and \*Gali-Muhtasib H. 2007. **Onopordum cynarocephalum induces apoptosis and protects against 1,2 dimethylhydrazine-induced colon cancer.** Oncology Reports 17(6):1517-23.

- Itani W, Geara F, Haykal J, Haddadin M, and \*Gali-Muhtasib H. 2007. **Radiosensitization by 2-benzoyl-3-phenyl-6,7-dichloroquinoxaline 1,4-dioxide under oxia and hypoxia in human colon cancer cells.** Radiation Oncology, 2:1.
- Al-Ayyoubi, S. and \*Gali-Muhtasib, H. 2007. **Differential Apoptosis by Gallotannin in Human Colon Cancer Cells with Distinct p53 Status.** Molecular carcinogenesis, 46(3):176-186.  
Haykal J, Fernainy P, Itani W, Haddadin M, Geara F, Smith C, \*Gali-Muhtasib H. 2008. **Radiosensitization of EMT6 mammary carcinoma cells by 2-benzoyl-3-phenyl-6,7-dichloroquinoxaline 1,4-dioxide.** Radiother Oncol. 86(3):412-8. Epub 2007 Nov 19.

## 2006

- Khattar MM, Bazzi S, Kogan J and Talhouk RS (2006) – **Bacterial Cell Shape Dependent Inflammatory Response in Mammary Epithelial Cells.** Current Microbiology. 52(6):424-429. (Epub 2006 Apr 17).
- Makhoul, H., Ghaddar, T. and Toufeili, I. **Identification of Some Rancidity Measures at the End of the Shelf-Life of Sunflower Oil.** European Journal of Lipid Science and Technology (2006), 108(2):143-148.
- \*Gali-Muhtasib H, Roessner A, Schneider-Stock R. 2006. **Thymoquinone: a promising anti-cancer drug from natural sources.** International Journal of Biochemistry and Cell Biology 38(8):1249-53

## 2005

- **Article Title: Quinoxaline 1,4-dioxides induce G2/M cell cycle arrest and apoptosis in human colon cancer cells.**  
  
Author: Gali-Muhtasib HU, Diab-Assaf M, Haddadin MJ.  
Department: Biology  
Magazine: Cancer Chemother Pharmacol. 2005 Apr;55(4):369-78.  
Equipment Used: Flowcytometer
- **Article Title: Crystal field investigations and magnetic properties of Nd<sup>3+</sup> doped Bi<sub>4</sub>Si<sub>3</sub>O<sub>12</sub>Phys.**

Author: S. Isber, M. Tabbal, T. Christidis, S. Charar, F. Terki and M. Ishii  
Department: Physics  
Magazine: Rev B71, 014405, pp1-5 (2005).  
Date: November 2005  
Equipment Used: PPMS, XRD

- Talhouk, R.S., Elble, R., Bassam R., Daher M., Sfeir A, El-Khoury H, Hamoui, S, Pauli, B and M. E. El-Sabban (2005). **Developmental expression patterns and regulation of connexins in the murine mammary gland: Expression of connexin30 in lactogenesis.** Cell Tissue Res. 319(1):49-59. (Epub 2004 Oct 27).
- Ziadeh, G., Shadarevian, S., Malek, A., Khalil, J., Haddad, T., Haddad, J. and Toufeili, I. **Determination of Sensory Thresholds of Selected Calcium Salts and Formulation of Calcium-Fortified Pocket-Type Flat Bread.** Journal of Food Science (2005), 70(8):548-552. \*Gali-Muhtasib H.U., Diab-Assaf M. and Haddadin M.J. 2005.

## **2004**

- **Quinoxaline 1,4-dioxides Induce Cell Cycle Arrest, Apoptosis and changes in transforming growth factors and Extracellular signal-regulated kinase expression in Human colon cancer cells.** Cancer Chemotherapy and Pharmacology, 55(4):369-378.
- **Article Title: N-(4-Hydroxyphenyl) Retinamide Induces Growth Arrest and Apoptosis in HTLV-I Transformed Cells.**

Authors: Darwiche, N., Hatoum, A, Dbaibo, G., Kadara, H., Nasr, N., Abou-Lteif, G., Bazzi, R., Hermine, O., de Thé, H. and Bazarbachi, A.  
Department: Biology  
Magazine: Leukemia. 18: 607-615, 2004.  
Equipment Used: Flow cytometry

- **Article Title: Stage-Specific Effect of N-(4-Hydroxyphenyl) Retinamide on Cell Growth in Squamous Cell Carcinogenesis.**

Authors:Kabbout, M., Hatoum, A., Abou-Lteif, G., Chakroun, I., Homaidan, F. and Darwiche, N.  
Department: Biology  
Magazine: Molecular Carcinogenesis. 40: 12-23, 2004.  
Equipment Used: Flow cytometry, fluorescence microscopy, and dark room (develop X-ray films)

- **Article Title: Molecular pathway for thymoquinone-induced cell-cycle arrest and apoptosis in neoplastic keratinocytes**

Author: Hala U. Gali-Muhtasib, Wassim G. Abou Kheir, Lynn A. Kheir, Nadine Darwiche and Peter A. Crooks  
Department: Biology  
Magazine: Anti-Cancer Drugs 2004, April, 15:389–399  
Equipment Used: Flow cytometer, fluorescence microscope

- **Article Title: Quinoxaline 1,4-dioxides are Novel Angiogenesis Inhibitors that Potentiate Antitumor Effects of Ionizing Radiation.**

Author: Hala Gali-Muhtasib, Ph.D., Mazen Sidani, MSc., Fady Geara, M.D., Ph.D., Assaf-Diab Mona, Ph.D., Josianne Al-Hmaira, BSc., Makhlu J. Haddadin, Ph.D., and Ghazi Zaatari, M.D.  
Department: Biology  
Magazine: International Journal of Oncology, 2004 May;24(5):1121-31.  
Equipment Used: Flow cytometer, fluorescence microscope

- **Article Title: Inhibition of proliferation and induction of apoptosis by 2-benzoyl-3-phenyl-6,7-dichloroquinoxaline 1,4-dioxide in adult T-cell leukemia cells.**

Authors: Steve Harakeh, Mona Diab-Assef, Marwan El-Sabban, Makhlu J. Haddadin, Hala Gali-Muhtasib  
Department: Biology  
Magazine: Chem Biol Interact. 2004 Jul 20;148(3):101-13.  
Equipment Used: Flow cytometer, fluorescence microscope

- **Article Title: Thymoquinone extracted from black seed triggers apoptotic cell death in human colorectal cancer cells via a p53- dependent mechanism.**

Author: Hala Gali-Muhtasib  
Department: Biology  
Magazine: International Journal of Oncology 2004 Oct;25(4):857-66.  
Equipment Used: Flow cytometer, fluorescence microscope

- Harakeh S, Diab-Assef M, El-Sabban M, Haddadin M, \*Gali-Muhtasib H. 2004. **Inhibition of proliferation and induction of apoptosis by 2-benzoyl-3-phenyl-6,7-dichloroquinoxaline 1,4-dioxide in adult T cell leukemia cells.** Chemico-Biological Interactions 148(3), 101-113.

- **\*Gali-Muhtasib H.U.**, Aboukheir W., Kheir L., Darwiche N., Crooks P. 2004. **Molecular pathway for Thymoquinone-induced cell cycle arrest and apoptosis in neoplastic keratinocytes.** Anticancer Drugs 15 (4), 389-399.
- **\*Gali-Muhtasib H.U.**, Sidani M., Geara F., Assaf-Diab M., Al-Hmaira J., Haddadin M.J., Zaatari G. 2004. **Quinoxaline 1,4-dioxides are Novel Angiogenesis Inhibitors that Potentiate Antitumor Effects of Ionizing Radiation.** International Journal of Oncology 24, 1121-1131.
- B. Safieh-Garabedian, G. M. Mouneimne, W. El-Jouni, M. Khattar, and R. Talhouk (2004). **The effect of endotoxin (ET) on functional parameters of mammary CID-9 cells in culture.** Reproduction 127(3):397-406.
- **\*Gali-Muhtasib H.**, Diab-Assaf M, Boltze C, Al-Hmaira J, Hartig R, Roessner A and Schneider-Stock R. 2004. **Thymoquinone extracted from black seed triggers apoptotic cell death in human colorectal cancer cells via a p53-dependent mechanism.** International Journal of Oncology 25(4), 857-866.

## 2003

- El-Sabban, M., Sfeir A., Daher M., Kalaany, N., Bassam, R., and Talhouk R. (2003). **Gap Junctional Communication Induces  $\kappa$ -Casein Expression in Mammary Epithelial Cells in the Absence of Cell/ECM interaction.** J. Cell Science 116: 3531-3541.

## 2002

- Diab-Assaf, M., Haddadin, M.J., Yared, P., Assaad., C., and **\*Gali-Muhtasib, H.U.** 2002. **Quinoxaline 1,4-dioxides: hypoxia selective therapeutic agents.** Molecular carcinogenesis 33 (4): 198-205.

## 2001:

- Talhouk, R., Maa'ni, F., Kalaa'ni, N., Zoubian, G.S., Simaa'n C.J., Abi-Sai'd, M., Hamadeh, S.K., Barbour, E., and El-Sabban, M. (2001). **Partial purification and characterization of growth factors involved in ovine mammary development.** Domestic Animal Endocrinology 3:143-159.

## NO YEAR:

- **Article Title: Quinoxaline 1,4-dioxides INDUCE G2/M cell cycle arrest and apoptosis in human colon cancer cells.**

Author: Hala U. Gali-Muhtasib Assaf-Diab Mona, and Makhluf J. Haddadin  
Department: Biology  
Magazine: Cancer Chemotherapy and Pharmacology, in press  
Equipment Used: Flow cytometer, fluorescence microscope

- **Article Title: Exchange Coupling in Spins Quartet of Dimeric Polyoxoanions [M<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>(GeW<sub>9</sub>O<sub>34</sub>)<sub>2</sub>]<sub>12</sub>- (M = Mn<sup>2+</sup>, Cu<sup>2+</sup>)**

Author: S. Isber, M. Tabbal, T. Christidis, S. Charar and F. Terki  
Department: Physics  
Magazine: Journal of Magnetism and Magnetic Materials (In Press)  
Equipment used: Physical Properties Measurements System (PPMS), Spectrophotometer UV, Visible and Near IR, X-Ray diffractometer.

- **Article Title: Crystal field investigations and magnetic properties of Nd<sup>3+</sup> doped Bi<sub>4</sub>Si<sub>3</sub>O<sub>12</sub>**

Author: S. Isber, M. Tabbal, T. Christidis, S. Charar, F. Terki and M. Ishii  
Department: Physics  
Magazine: Phys. Rev B. (In press)  
Equipment used: Physical Properties Measurements System (PPMS), Spectrophotometer UV, Visible and Near IR, X-Ray diffractometer.

- **Article Title: Cross talk between insulin and angiotensin II. Role of Losartan in the prevention of cardiomyopathy in normotensive diabetic type I rats with no nephropathy**

Author: Nuha Nuwayri-Salti M.D.  
Department: Human Morphology  
Equipment Used: Fluorescence Microscope

- **Article Title: Apoptosis Induction by Epican Forte in HTLV-1 Positive and Negative Malignant T-Cells.**

Authors: S. Harakeh, M. Diab-Assaf, J. Khalifeh, K. Abu El-Ardat  
Department: Biology



Equipment Used: Flowcytometer, Fluorescence Microscope, Gel Documentation System, and XOMAT.

- **Article Title: Simulation of Geochemical banding in Acidization-Precipitation Experiments in Situ**

Authors: Maysam Msharrafieh, Mazen El-Ghoul, Rabih Sultan

Department: Chemistry

Equipment Used: Atomic Absorption Spectrophotometer, Fluorescence Microscope, and X-Ray Diffractometer

- **Article Title: Patterns with High Rhythmicity Levels in Multicomponent Liesegang Systems**

Authors: Maysam Msharrafieh and Rabih Sultan

Department: Chemistry

Magazine: CHEMPHYSICHEM

Equipment Used: Atomic Absorption Spectrophotometer, Fluorescence Microscope, and X-Ray Diffractometer.

Equipment Used at the CRSL: NMR Spectrometer, Fluorometer, Spectrophotometer.

- Dr. Rabih Talhouk, Biology Department, Use of Flowcytometer, Gel documentation system, and XOMAT.

- **Anti-inflammatory bio-activities in water extract of Centaurea ainetensis.** Journal of Medicinal Plants Research 2:024-033.

- **Dr. Imad Saoud**, Biology Department, Use of Osmometer and Atomic Absorption Spectrophotometer.

- **Dr. Imad Toufeili**, Nutrition Department, Use of Atomic Absorption Spectrophotometer and UV – VIS-NIR Spectrophotometer

- Najm, N.O.E., Olabi, A., Kreyydieh, S. and Toufeili, I. **Determination of Visual Detection Thresholds of Selected Iron Fortificants and Formulation of Iron-Fortified Pocket-Type Flat Bread.** Journal of Cereal Science (In Press).
- **Dr. Hala Muhtasib**, Biology Department, use of flowcytometer, XOMAT, HPLC and NMR.
- El-Najjar N, Chatila M, Mokaddam H, Vuorela H, Ocker M, Gandesiri M, Schneider-Stock R, and \***Gali-Muhtasib H.** 2010. **Reactive oxygen species mediate thymoquinone-induced apoptosis and activate ERK and JNK signalling.** Apoptosis 15(2):183-95.