PUBLICATIONS AND PARTICIPATIONS

Dissertations

Postdoctoral Research Report: *"New Liquid Crystalline Oligophenylene Derivatives for Organic Thin Film Transistor Application".*

Ph.D. Thesis: *"Synthesis and Investigation of New Large Self-Assembled Supramolecules as Potential Electron Emitters".*
http://ethesis.unifr.ch/theses/downloads.php?file=AlameddineB.pdf

M. Sc. Diploma: *"Development of a Procedure for the Elaboration of Thin Quasicrystalline Films by Chemical Vapor Deposition".*

B.Sc. Project: *"Growth and Characterization of Ternary InGaAs-InP by Low Pressure Metal Organic Chemical Vapor Deposition".*

Publications in International Peer-reviewed Journals

1. Alameddine, B.; Rice, A.; Jenny, T. A.; Luscombe, C. "Synthesis of Arylamine Tribenzopentaphenes and Investigation of their Hole Mobility", ChemistryOpen **2015**, 4, 453. **DOI: 10.1002/open.201500064**

2. Alameddine, B.; Aebischer, O.; Heinrich, B; Donnio, B.; Guillon, D.; Jenny T. A. "Influence of Linear and Branched Perfluoroalkylated Side Chains on the π-π Stacking Behavior of Hexa-*peri*-hexabenzocoronene and Thermochemical Properties" *Supramol. Chem.* **2014**, 26, 125-137. DOI: **10.1080/10610278.2013.831860**

3. Antony, J.; Alameddine, B.; Jenny, T. A.; Grimme, S. "Theoretical Study of the Stacking Behavior of Selected Polycondensed Aromatic Hydrocarbons with Various Symmetries", *J. Phys. Chem. A*, **2013**, 117, 616-625. DOI: **10.1021/jp3075207**

4. Alameddine, B; Schindler, M.; Martin-Caba, S.; Jenny, T. A.; "Synthesis of Alkyl- Substituted Tribenzopentaphenes as Versatile Polycondensed Aromatic Hydrocarbon π-π Stacking Building Blocks" *Synthesis*, **2012**, *44*, 1928-1934. DOI: **10.1055/s-0031-1291010**

5. Aebischer, O.; Alameddine, B.; Jenny, T. A.; "Hexabenzocoronenes - Controlling their Self-assembly by Engineering the Lateral Substituents" *Chimia*, **2008**, 62, 967. DOI: **10.2533/chimia.2008.967**

6. Aebischer, A.; Aebischer, O. F.; Alameddine, B.; B. Donnio; Dadras, M.; Güdel, H.-U.; Guillon, D.; Jenny, T. A. "Controlling the Lateral Aggregation of Perfluoroalkylated Hexabenzocoronenes" *J. Mat. Chem.* **2007**, 17(13), 1262-1267. DOI: **10.1039/b616057c**

7. Alameddine, B.; Aebischer, O.; Savary, C.; Jenny, T. A.; "Synthesis of Perfluoroalkylated Bulky Triaryl Amines" *Synthesis*, **2007**, 2, 271-276. DOI: **10.1055/s-2006-958953**

8. Sanaur, S.; Whalley, A.; Alameddine, B.; Carnes, M.; Nuckolls, C.;" Jet-printed Electrodes and Semiconducting Oligomers for Elaboration of Organic Thin-film Transistors" *Organic Electronics*, **2006**, 7, 423-427. DOI: **10.1016/j.orgel.2006.05.003**

9. Aebischer, O.; Aebischer, N.; Tondo, P.; Alameddine, B.; Dadras, M.; Guedel, H.; Jenny T. A. "Self-aggregated Perfluoroalkylated Hexa-peri-hexabenzocoronenes Fibers Observed in Cryo-SEM and Fluorescence Spectroscopy" *Chemical Communications*, **2006**, 40, 4221-4223. DOI: **10.1039/b609056g**

10. Aebischer, O.; Tondo, P.; Alameddine, B.; Jenny T. A. "Synthesis of Novel Perfluorinated Hexa-peri-hexabenzocoronenes" **2006**, *Synthesis*, 17, 2891-2896. DOI: **10.1055/s-2006-942550**

11. Alameddine, B.; Aebischer, O.; Amrein, W.; Deschenaux, R.; Donnio, B.; Guillon, D.; Savary, C.; Scanu, D.; Scheidegger, O.; Jenny T. A. " Mesomorphic Hexabenzo- coronenes Bearing Perfluorinated Chains" *Chem. Mater.*; **2005**, 17(19), 4798 – 4807. DOI: **10.1021/cm050612o**

12. Tran, F.; Alameddine, B.; Jenny, T. A.; Wesolowski, T. "π-Stacking Behavior of Selected Nitrogen-Containing PAHs" *J. of Phys. Chem. A* **2004**, 108(42), 9155-9160. DOI: **10.1021/jp048713h**

Conferences Proceedings

- Alameddine, B.; Rice, A.; Jenny, T. A.; Luscombe, C. "Synthesis of arylamine tribenzo-pentaphenes and investigation of their hole mobility" *In Malta VII Conference – Frontiers of Science: Research and Education in the Middle East* **2015**

- Alameddine, B.; Rice, A.; Jenny, T. A.; Luscombe, C. "Synthesis of arylamine tribenzo-pentaphenes and investigation of their hole mobility" *Chimia*, **2015**, 69, 136.

- Alameddine, B.; Jenny, T. A.; Luscombe, C. "Arylamine Tribenzopentaphenes: Versatile Synthesis and study of their Hole Mobility" *In 249th American Chemical Society National Meeting, Denver, Colorado,* **2015**.

- Alameddine, B.; Martin-Caba, S; Jenny, T. A. "Half-Lunar Polycondensed Aromatic Hydrocarbons with Alkyl and Aryl Amine Side Groups: Versatile π-π Stacking Building Blocks" *In Malta VI Conference – Frontiers of Science: Research and Education in the Middle East* **2013**.

- Alameddine, B.; Martin-Caba, S; Jenny, T. A. "Synthesis of Various Alkyl and Aryl Amine Substituted Half-Lunar Polycondensed Aromatic Hydrocarbons: Versatile π-π Stacking Building Blocks" *In 245th American Chemical Society National Meeting, New Orleans, Louisiana,* **2013**.

- Alameddine, B.; Jenny, T. A.; "Engineering the Self-Assembly of PAHs: Materials for Optoelectronic Applications" *In 14th International Union of Pure and Applied Chemistry Conference on Polymers and Organic Chemistry (POC 2012), Qatar,* **2012**.

- Alameddine, B.; Jenny, T. A.; "Engineering the Self-Assembly of Polycondensed Aromatic Hydrocarbons: Versatile Materials for Optoelectronic Applications" *In 1st Arab-American Frontiers Symposium for Science, Engineering, and Medicine, Kuwait,* **2011**.

- Dadras, M. M.; Aebischer, O.; Alameddine, B.; Jenny, T. A.; de Rooij, N.; "Cryo SEM: Application in Micro and Nanotechnology" *In Proceedings the 16th International Microscopy Congress: Sapporo, Japan*, **2006**; Vol. 3, p 1822.

- Barret, M. ; Sanaur, S. ; Alameddine, B. ; Carnes, M. ; Nuckolls, C. ; Collot, P. ; *"Jet de Matière pour l'Electronique Plastique : Réalisation et caractérisation de transistors imprimés sur différents substrats"* In DIELOR (DIspositifs ELectroniques ORganiques), Paris, **2006**.

- B. Alameddine, M. Barret, M. Carnes, R. Fortunier, C. Nuckolls, S. Sanaur *"Inkjet Printing: Key technology for Plastic Electronics Plastic Electronics"* In Messe Frankfurt, Germany, October 4 and 5, **2005**.

- Alameddine, B.; Jenny, T. A. "Synthesis and characterization of large self-assembled disc-shaped supramolecules: Potential conducting devices" *Chimia*, **2003**, 57, 445.

- Alameddine, B.; Jenny, T. A.; Ruffieux, P.; Groening, O.; Groening, P.; Schlapbach, L. "Synthesis and Investigation of New Disc-Shaped Conducting Supramolecules" *Chimia*, **2002**, 56, 357.

- Alameddine, B.; Jenny, T. A.; Ruffieux, P.; Groening, O.; Groening, P.; Schlapbach. L. *"Electron Emission from Disc-Shaped Supramolecules for Flat Panel Displays"* In SFC Eurochem; Toulouse, **2002**, pp 3-1.

- Alameddine, B.; Jenny, T. A. *"Synthesis and Investigation of New Disc-Shaped Conducting Supramolecules"* Poster presented at the NFP47-FNS reunion, Bern, Switzerland, **2001**.

- Alameddine, B.; Jenny, T. A. "Synthesis and Investigation of New Triaryl Amine Compounds" *Chimia*, **2001**, 55, 638.

Invited Presentations/Talks

2011 *Self-Assembled Organic Materials for Various Applications*
Federal Polytechnic Institute of Lausanne, Switzerland

Carbon-based Aromatic Nanostructures: Versatile Materials for Optoelectronic Applications
Gulf University for Science and Technology, Kuwait

2009 *Nanostructured Organic Supramolecules with Enhanced Self-Assembly for Electronic Applications*
New York University, New York City, USA

2008 *Controlling Self-assembly of Organic Nanostructures for Electronic Applications*
Chimie, Ingénierie Moléculaire d'Angers (CIMA), France

Suppressing Lateral Aggregation of Nanostructured Organic Electron Emitters
United Arab Emirates University, Al-Ain, UAE

2007 *Self-assembled Nanostructured Organic Materials for Electronic Applications*
King Fahd University of Petroleum and Minerals, Saudi Arabia

2006 *Smart Organic Materials for Plastic Electronics*
Huntsman Advanced Materials, Basel Switzerland

Liquid Crystalline Materials for Electronic Applications
ROLIC Technologies, Basel, Switzerland
Smart Materials for Potential Electronic Applications
The Holst Center, TNO, Eindhoven, Netherlands
Printing Organic Materials for Plastic Electronics
Barret, M. ; Sanaur, S. ; Alameddine, B. ; Carnes, M. ; Nuckolls, C. ; Collot, P.
DIELOR (DIspositifs ELectroniques ORganiques), Paris, France

2005 *Synthesis and Investigation of New Organic Materials for Various Electronic Applications*
CIBA Specialty Chemicals, Basel, Switzerland

Organic Materials for Potential Electronic Applications
Lebanese International University, Beirut, Lebanon

New Organic Materials for Displays
Universal Display Corporation, New Jersey, USA

2004 *Perfluorinated HBCs as Field Emitter Tips for FEDs*
Center for Materials Testing, EMPA, Thun, Switzerland

Synthesis and Investigation of New Large Self-Assembled Supramolecules as Potential Electron Emitter
Columbia University, New York City, USA

2003 *Synthesis and Investigation of New Disc-Shaped Conducting Supramolecules*
BeNeFri Materials Day, University of Fribourg, Switzerland

2001 *Synthesis of New Conducting Supramolecules*
Supramolecular Functional Materials-Swiss National Science Foundation reunion, Bern, Switzerland