

## PUBLICATIONS LIST

### 2015

1. David Lopez-Ferber, Scherrine A. Tria, Olukayode Karunwi, Catherine Gonzalez, Anthony Guiseppi-Elie and Ingrid Bazin "Microfabricated Biosensor for the Amperometric Detection and Monitoring of Ochratoxine A" *Biosensors and Bioelectronics* (2015) (*In Preparation*)
2. Christian N. Kotanen, Dileep R. Janagam, Rachelle Idziak, Luke Rhym, Ryan Sullivan, Ann M. Wilson, Tao L. Lowe and Anthony Guiseppi-Elie "Drug Partitioning into DMAEMA containing poly(HEMA)-based Hydrogels Using Coomassie Brilliant Blue" *European Polymer Journal* (2015) (**submitted for publication**).
3. Deon Hines, Olukayode Karunwi, William R. Harrell and Anthony Guiseppi-Elie, "Choice of Electrode Metal Influences the Chemoresistive Vapor Response of Brominated SWCNTs" *Macromolecular Symposia* (2015) (**accepted for publication**).

### 2014

4. Romain R Soleri, Harry H Demey, Scherrine S Tria, Anthony Guiseppi-Elie, Aziza A Ibn Hadj Hassine, Catherine C Gonzalez, Ingrid Bazin "Peptide conjugated chitosan foam as a novel approach for capture-purification and rapid detection of hapten - Example of Ochratoxin A" *Biosensors and Bioelectronics* (2014) 67, 634-641.  
doi:[10.1016/j.bios.2014.09.084](https://doi.org/10.1016/j.bios.2014.09.084)
5. A. Nolan Wilson, Mark Blenner and **Anthony Guiseppi-Elie** "Polyplex Formation Influences Release Mechanism of Mono- and Di-valent Ions from Phosphorylcholine Group Bearing Hydrogels" *Polymers* (2014) 6(9), 2451-2472;  
doi:[10.3390/polym6092451](https://doi.org/10.3390/polym6092451)
6. Alfonso Sepúlveda, M. Tylinski, **Anthony Guiseppi-Elie**, R. Richert and Mark D. Ediger\* "Role of fragility in the formation of highly stable organic glasses" *Physical Review Letters* (2014, July 25) 113(4), 045901-5. doi: [10.1103/PhysRevLett.113.045901](https://doi.org/10.1103/PhysRevLett.113.045901)
7. Cecilia Agrell, Alice Amoding, Simon Bell, Filipo Bosco, Dermot Diamond, Jenny Emnéus, Anthony Guiseppi-Elie, Atkins Katusabe, Jim Lynch, Stephen Morse, Francis G. Moussy, Fionn Murtagh, P. K. R. Nair, Pamela J. Weathers. "Transdisciplinary Sustainability: The Council for Frontiers of Knowledge" *International Journal of Transdisciplinary Research* (2014) Vol. 7, No. 1, Pages 1-26. Doi: [Paper](#)
8. Alan S. Campbell, Chenbo Dong, Andrew Maloney, Jeremy Hardinger, Xiao Hu, Fanke Meng, Anthony Guiseppi-Elie, Nianqiang Wu, Cerasela Zoica Dinu "A Systematic Study of the Catalytic Behavior at Enzyme-Metal-Oxide Nanointerfaces" *Nano LIFE* 04, 1450005 (2014) doi: [10.1142/S1793984414500056](https://doi.org/10.1142/S1793984414500056)
9. Christian N. Kotanen, Olukayode Karunwi and **Anthony Guiseppi-Elie** "Biofabrication Using Pyrrole Electropolymerization for the Immobilization of Glucose Oxidase and Lactate Oxidase on Implanted Microfabricated Biotransducers" *Bioengineering* (2014), 1(1), 85-110. doi:[10.3390/bioengineering1010085](https://doi.org/10.3390/bioengineering1010085)

10. A. Nolan Wilson and **Anthony Guiseppi-Elie** "Targeting Homeostasis in Drug Delivery Using Bioresponsive Hydrogel Microforms" *International Journal of Pharmaceutics* (2014) 461(1-2) 214-222. doi: [10.1016/j.ijpharm.2013.11.061](https://doi.org/10.1016/j.ijpharm.2013.11.061) (IF 3.458)

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11. K. Mistewicz; M. Nowak, R. Wrzalik, M. Jesionek, P. Szperlich, R. Paszkiewicz and **A. Guiseppi-Elie** "Quantum Effects in Electrical Conductivity and Photo conductivity of Single SbSI Nanowire" *Acta Physica Polonica A* (2013) 124 (5) 827-829. doi: [10.12693/APhysPolA.124.827](https://doi.org/10.12693/APhysPolA.124.827)
12. Guneet Bedi, Christian Kotanen, Olukayode Karunwi, Amanda Nguyen, Ferhat Bayram, Brian Hudson, Yu Zhao and **Anthony Guiseppi-Elie** "Enzyme Biotransducers Formed from Conductive Electroactive Polymers" *IEEE Sensors* (2013) 3-6 Nov. 2013. doi: [10.1109/ICSENS.2013.6688386](https://doi.org/10.1109/ICSENS.2013.6688386) (IF 1.17)
13. Olakayode Karunwi, Cassidy Baldwin, Gisela Griesheimer, Sapna Sarupria, **Anthony Guiseppi-Elie** "Molecular Dynamics Simulations of Peptide-SWCNT Interactions Related to Enzyme Conjugates for Biosensors and Biofuel Cells" *NanoLIFE* (2013) 13(4) 1343007. doi: [10.1142/S1793984413430071](https://doi.org/10.1142/S1793984413430071) (IF 2.49)
14. Christian N. Kotanen and **Anthony Guiseppi-Elie** "Characterization of a wireless potentiostat for integration with a novel implantable biotransducers" *IEEE Sensors Journal* (2013) PP:99. doi: [10.1109/JSEN.2013.2288059](https://doi.org/10.1109/JSEN.2013.2288059) (IF 1.526)
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18. Christian N. Kotanen and **Anthony Guiseppi-Elie** "Monitoring Systems and Quantitative Measurement of Biomolecules for the Management of Trauma" *Biomedical Microdevices* (2013) 15(3) 561-577. doi: [10.1007/s10544-013-9756-x](https://doi.org/10.1007/s10544-013-9756-x) (IF=3.15)
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24. A. Nolan Wilson and **Anthony Guiseppi-Elie** "Bioresponsive Hydrogels" *Advanced Healthcare Materials* (2013) 2(4) 520-532. [doi:10.1002/adhm.201200332](https://doi.org/10.1002/adhm.201200332)

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26. Christian N. Kotanen and **Anthony Guiseppi-Elie** "Bioactive Electroconductive Hydrogels Yield Novel Biotransducers for Glucose" *Macromolecular Symposia* (2012) 317-318(1): 187-197. [Issue doi:10.1002/masy.201100164](https://doi.org/10.1002/masy.201100164)
27. **Anthony Guiseppi-Elie**, Chenbo Dong and Cerasela Zoica Dinu "Crosslink Density of a Biomimetic Poly(HEMA)-based Hydrogel Influences Growth and Proliferation of Attachment Dependent RMS 13 Cells" (*invited*) *J. Mater. Chem.* (2012) 22 (37), 19529 – 19539 [doi: 10.1039/C2JM32516K](https://doi.org/10.1039/C2JM32516K) (IF 6.10)
28. Sandro Carrara, Sara Seyedeh Ghoreishizadeh, Jacopo Olivo, Irene Taurino, Camilla Baj-Rossi, Andrea Cavallini, Maaike Op de Beeck, Wayne P. Burleson, Francis Gabriel Moussy, **Anthony Guiseppi-Elie**, Giovanni De Micheli "Fully Integrated Biochip Platforms for Advanced Healthcare" *Sensors: Biochips* (2012) 12(8), 11013-11060 (IF 1.92) [doi: 10.3390/s120811013](https://doi.org/10.3390/s120811013)
29. A. Nolan Wilson, Ruth Salas and **Anthony Guiseppi-Elie** "Bioactive Hydrogels Demonstrate Mediated Release of a Chromophore by Chymotrypsin" *Journal of Controlled Release* (2012) 150(1) 41-47. [doi: 10.1016/j.jconrel.2012.02.026](https://doi.org/10.1016/j.jconrel.2012.02.026) (IF 6.49)
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38. Gusphyl Justin and **Anthony Guiseppi-Elie\***, "An Electroconductive Blend of p(HEMA-co-PEGMA-co-HMMA-co-SPMA) Hydrogels and p(Py-co-PyBA): In Vitro Biocompatibility" *Journal of Bioactive and Compatible Polymers* (2010), 25(2) 121-140. [doi:10.1177/0883911509350660](https://doi.org/10.1177/0883911509350660) (IF=0.93)
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## SYMPOSIUM PROCEEDINGS (Peer Reviewed)

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2. Guneet Bedi, Christian Kotanen, Olukayode Karunwi, Amanda Nguyen, Ferhat Bayram, Brian Hudson, Yu Zhao, Anthony Guiseppi-Elie "Enzyme Biotransducers Formed from Conductive Electroactive Polymers" *IEEE Sensors 2013*. Renaissance Harbor Place Hotel. November 3-6, 2013. Baltimore, Maryland, USA.
3. Olukayode Karunwi and Anthony Guiseppi-Elie "Prospects for Direct Electron Transfer in Gen-3 Biosensors and Advanced Biofuel Cells with SWNT-GOx Conjugates" *AICHE National Meeting 2013*. San Francisco. November 03-08, 2013.
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12. Christian N. Kotanen and **Anthony Guiseppi-Elie** "Biotechnology applications of electroconductive hydrogels: Biosensors, bionics and electrorelease devices" Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
13. Olukayode Karunwi, Robert A. Latour, and **Anthony Guiseppi-Elie** "Single-walled carbon nanotube-glucose oxidase conjugates: Structure and bioactivity" Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
14. Subhra S. Nag, Sandy Deitch, Delphine Dean and **Anthony Guiseppi-Elie** "Biomimetic poly-(HEMA)-based hydrogels as bio-smart interface for intramuscular implantable biosensors" Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
15. **Anthony Guiseppi-Elie** "Bioactive Electroconductive Hydrogels" Hybrid Biomaterials AIChE Annual Meeting, Minneapolis Convention Center Minneapolis, Minnesota, USA. **October 16-21, 2011.**
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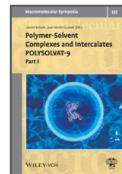
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34. Marin Gheorghe, Chenghong Lei, and **Anthony Guiseppi-Elie** "Low-density arrays of DNA-doped polypyrrole" *Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering - PMSE Preprints* (**2000**) Vol. 83, 550.
35. Sean Brahim, Dyer Narinesingh and **Anthony Guiseppi-Elie** "Electroactive hydrogels for the construction of clinically important biosensors" *Proceedings of the American Chemical*

*Society Division of Polymeric Materials: Science and Engineering - PMSE Preprints (2000) Vol. 83, 514.*

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37. Kerrianne Cullen and **Anthony Guiseppi-Elie** "DNA Detection Using Colloidal Gold Nanoparticles: Towards Near Patient DNA Diagnostics" *Symposium JJ: Student Papers HH6 (UMRI-18)*. In, *Proceedings of the Spring 2002 MRS Meeting*, San Francisco, California. April 24 - 28, 2000.
38. A. M. Wilson, E. Iwuoha, D. Narinesingh, **A. Guiseppi-Elie** "Divalent Cation Electrorelease from Electroconductive Hydrogels" In *Proceedings of the XII Conference on Chemistry and Chemical Engineering*; University of the West Indies, St. Augustine: Republic of Trinidad and Tobago; March 28-April 1, **1999**.
39. Sheldon P. Wesson, Rafael Chou, Ann M. Wilson and **Anthony Guiseppi-Elie**. "Impedance Spectroscopy and Inverse Phase Gas Chromatography for Evaluating Probe/Polymer Interactions in Cured Latex Coatings". *Proceedings of the Second International Symposium on Acid-Base Interactions: Relevance to Adhesion*. October 19 - 21, **1998**. Newark, NJ.
40. **Anthony Guiseppi-Elie**, Ann M. Wilson, Andrew R. Sujdak and Kimberly E. Brown, "Electroconductive Hydrogels: Novel Materials for the Controlled Electrorelease of Bioactive Peptides" *Polymer Preprints* (**1997**), 38(2), p. 608.
41. **Anthony Guiseppi-Elie**, Andrew S. Sujdak, and Ann M. Wilson, "Electroconductive Hydrogels: Electrical, Electrochemical and Impedance Properties" *Proceedings of the Fall 1997 MRS Meeting, Symposium J*, Boston, **1997**.
42. **Anthony Guiseppi-Elie** and Norman F. Sheppard, Jr "Conferring Biospecificity to Electroconductive Polymer-based Biosensor Devices" *Proceedings of the Symposium on Polymers of Biological Significance*; ACS Northeast Regional Meeting (NERM), University of Rochester, Rochester, NY: October 22- 25, **1995**.
43. **Anthony Guiseppi-Elie\*** and A M. Wilson, "Electroconductive Polymer Thin Films with Internal Bioactive Moieties for Biosensor Applications" *Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering* (**1995**), Vol. 72, 404.
44. **Anthony Guiseppi-Elie\*** and A M. Wilson, "Novel Analytical Method for Conductimetric Chemical and Biosensors Formed from Electroconductive Polymers" *Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering* (**1994**), Vol. 71, 381.
45. **Anthony Guiseppi-Elie**, A. M. Wilson, C. L. Linden, F. J. Pearce, W. P. Wiesmann, D. L. Glick "A Conductimetric H<sub>2</sub>O<sub>2</sub> Sensitive Electroconductive Polymer Transducer for Development of Oxidoreductase Enzyme Biosensors and Oxidoreductase Labeled Immunosensors" *Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering* (**1994**), Vol. 71, 651.

#### **BOOKS EDITED**

124. Macromolecule-Metal Complexes 15th Int. Symposium (MMC-15:**2013**) A. Guiseppi-Elie (ed.) *Macromolecular Symposium*, Vol. 205. Wiley-VCH, 2002, pp. 1-145. (ISBN)
125. **Anthony Guiseppi-Elie (ed)** *The Biochips Handbook (2009)*, Marcel Dekker, New York. P (In progress)
126. Macromolecule-Metal Complexes 9th Int. Symposium (MMC-9:**2002**) A. Guiseppi-Elie and K. Levon (eds.) *Macromolecular Symposium*, Vol. 186, Issue 1. Wiley-VCH, August 2002, pp. 1-185. ([ISBN 3-527-30476-2](#))



## **OTHER PUBLICATIONS**

"Feasibility Studies in Development of a Temporary Implantable Lactate Sensor Biochip for Monitoring During Hemorrhage" (**April 2004**) Anthony Guiseppi-Elie; Virginia Commonwealth University: [Annual Report A666524](#); 17 March 2003-16 March 2004, Pages: 46.  
EPSISTM Biosensor System: Operation and Application Manual. ABTECH Scientific, Inc., Yardley, PA. 40 pp.  
Interdigitated Microsensor Electrodes - An Application Note. EG&G PARC, Princeton, NJ. 12 pp.  
Biosensor-based Assays Using EPSISTM - An Application Note. AAI-ABTECH, Yardley, PA. 12 pp.  
A Conductimetric Urea Biosensor Based on Interdigitated Microsensor Electrodes - An Application Note. AAI-ABTECH, Yardley, PA. 4 pp.

## **PATENTS:**

Anthony Guiseppi-Elie; **US Patent Serial No.: US 61/401,901** "An implantable biochip to influence patient outcomes following trauma-induced hemorrhage: the PSMBioChip".  
A. Guiseppi-Elie; **US Patent Serial No.: X/XXX XXX** "Controlled Electrorelease Materials and Methods for their Production".  
A. Guiseppi-Elie; **US Patent Serial No.: X/XXX XXX** "Controlled Electrorelease Devices and Methods for their Production".  
A. Guiseppi-Elie; **US Patent No.: 5,766,934; Issued on: June 16, 1998.** "Chemical and Biological Sensor Devices Having Electroactive Polymer Thin Films Attached to Microfabricated Devices and Possessing Immobilized Indicator Moieties".  
A. Guiseppi-Elie; **US Patent No.: 5,352,574; Issued on: October 4th, 1994.** "Electroactive Polymers with Immobilized Active Moieties".  
A. Guiseppi-Elie; **US Patent No.: 5, 312,762; Issued on: May 17th, 1994.** "Method of Measuring an Analyte by Measuring Electrical Resistance of a Polymer Film Reacting with the Analyte".  
A. Guiseppi-Elie; **US Patent No.: 5,102,798; Issued on: April 7, 1992.** "Surface Functionalized Langmuir-Blodgett Films For Immobilization of Active Moieties".  
A. Guiseppi-Elie; **US Patent No.: 4,499,007; Issued on: February 12, 1985.** "Stabilization of Conductive Polymers in Aqueous Environments". With G. E. Wnek

**INVITED AND CONTRIBUTED TECHNICAL PRESENTATIONS:**

**2014**

1. *Award Lecture: Anthony Guiseppi-Elie "Biologically Inspired Microsystems for Achieving Physiological Stasis"* The 2014 Distinguished Visiting Professor Lecture, L'Ecole des mines d'Alès, Alès, France. **July 2nd, 2014.**
2. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Biologically Inspired Microsystems for Achieving Physiological Stasis"* J. Crayton Pruitt Family Department of Biomedical Engineering, University of Florida, Gainesville, Florida, USA. **May 5<sup>th</sup>, 2014** [LINK](#)
3. *Panel Discussion: Anthony Guiseppi-Elie "CRIB: Improving Organic and Bioelectronic Device Performance through Nano-Bio Technology"* 2014 NanoSAFE Bioelectronics and Biosensing International Symposium, West Virginia University, Morgantown, West Virginia, USA. **April 27<sup>th</sup>, 2014** [LINK](#)
4. *Invited Paper: Anthony Guiseppi-Elie "Functionalized SWCNT as Chemoresistors for the Electronic NOSETM"* 2014 NanoSAFE Bioelectronics and Biosensing International Symposium West Virginia University, Morgantown, West Virginia, USA.. **April 27<sup>th</sup>, 2014** [LINK](#)
5. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Biologically Inspired Microsystems for Achieving Physiological Stasis"* North Carolina Agricultural and Technical State University, Greensboro, North Carolina, USA. **March 7<sup>th</sup>, 2014**

**2013**

6. *Keynote Address: Anthony Guiseppi-Elie "Electropolymerization: An additive technique in biofabrication"* The 7th International Conference of the Africa Materials Research Society, Addis Ababa, Ethiopia. **December 8-13, 2013.** [LINK](#)
7. *Plenary Address: Anthony Guiseppi-Elie "Implantable Microsystems for The Management of Trauma"* BIBE 2013: 13th IEEE International Conference on BioInformatics and BioEngineering, Chania, Greece. **November 10-13, 2013.** [LINK](#)
8. *(Poster) Melissa D. Gaillard, Fouzan Alan and Anthony Guiseppi-Elie "Fabrication of Dual-Responsive K<sup>+</sup> and pH / Lactate and Glucose Trauma Sensors"* Clemson University Biomaterials Day Conference, Clemson House Clemson, SC, USA. **November 1-2, 2013.**
9. *Keynote Address: Fouzan Alam, Melissa D. Gaillard and Anthony Guiseppi-Elie "Equivalent Circuit Modeling of Bioactive Polypyrrole Films on Pt Microelectrodes"* Clemson University Biomaterials Day Conference, Clemson House, Clemson, SC. November 2, 2013.
10. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Biologically Inspired Microsystems for Achieving Physiological Stasis"* HUGH SALZBERG SEMINAR SERIES, Department of Chemistry and Center for Analysis of Structures and Interfaces (CASI), The City College of New York, New York City, NY, USA. **September 30, 2013.** [LINK](#)
11. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Biologically Inspired Microsystems for Achieving Physiological Stasis"* UNC Lineberger Comprehensive Cancer Center and Cancer Hospital, The University of North Carolina at Chapel Hill (UNC), Chapel Hill, North Carolina, USA. **September 27, 2013.** [LINK](#)

12. *Plenary Address: Anthony Guiseppi-Elie “Implantable Microsystems for Physiological Status Monitoring and Control” SABI 2013 and XIX edición del Congreso Argentino de Bioingeniería y VIII Jornadas de Ingeniería Clínica, Catalinas Park Hotel, San Miguel de Tucumán, Argentina. September 4-6, 2013* [LINK](#)
13. *Invited Paper: Christian N. Kotanen and Anthony Guiseppi-Elie “Towards multi-analyte biosensors: Biofabrication via electropolymerization” 15<sup>th</sup> IUPAC International Conference on MacroMolecular Complexes (MMC-15:2013), Greenville, South Carolina, USA. August 13-16, 2013.*
14. *Invited Colloquium Presenter: Anthony Guiseppi-Elie “Implantable Microsystems for The Management of Trauma” Department of Electrical and Computer Engineering, Marquette University, Milwaukee, Wisconsin, USA. May 30, 2013.*
15. *Invited Colloquium Presenter: Anthony Guiseppi-Elie “Bioactive Electroconductive Hydrogels for the Abio-Bio Interface” Department of Materials Science and Engineering, Georgia Institute of Technology, Atlanta, GA, USA. May 16-17, 2013.*
16. *Award Lecture: Anthony Guiseppi-Elie “Biologically Inspired Microsystems for Achieving Physiological Stasis” The 2013 Kenneth E. Avis Distinguished Visiting Professor Lecture, UT Department of Pharmaceutical Sciences, University of Tennessee, Memphis, Tennessee, USA. April 19, 2013.*
17. *Invited Paper: Anthony Guiseppi-Elie “Biologically Inspired Microsystems for Achieving Physiological Stasis” [2013 NanoSAFE Bioelectronics and Biosensing Symposium](#), Erickson Alumni Center, West Virginia University, Morgantown WV, USA. April 7-8, 2013.* [LINK](#)
18. *Anthony Guiseppi-Elie, Christian Kotanen, Olukayode Karunwi, Ferhat Bayram, Guneet Bedi, Brian Hudson, Amanda Nguyen, Yu Zhao “Enzyme Biotransducers Formed from Conductive Electroactive Polymers” [2013 NanoSAFE Bioelectronics and Biosensing Symposium](#). The Erickson Alumni Center, West Virginia University, Morgantown, WV, USA. April 7-8, 2013.* [LINK](#)
19. *Olukayode Karunwi and Anthony Guiseppi-Elie “SWNT-GOx Conjugates: Opportunities for Direct Electron Transfer In Gen-3 Biosensors” [2013 NanoSAFE Bioelectronics and Biosensing Symposium](#). The Erickson Alumni Center, West Virginia University, Morgantown, WV, USA. April 7-8, 2013.* [LINK](#)
20. *Christian N. Kotanen and Anthony Guiseppi-Elie “Wireless Dual-analyte Biosensor for Improving Trauma Management and Outcomes” [2013 NanoSAFE Bioelectronics and Biosensing Symposium](#). The Erickson Alumni Center, West Virginia University, Morgantown, WV, USA. April 7-8, 2013.* [LINK](#)
21. *Nolan Wilson and Anthony Guiseppi-Elie “Modeling Bioresponsive Hydrogels for Targeted Homeostasis in Drug Delivery” [2013 NanoSAFE Bioelectronics and Biosensing Symposium](#). The Erickson Alumni Center, West Virginia University, Morgantown, WV, USA. April 7-8, 2013.* [LINK](#)
22. *Invited Paper: Anthony Guiseppi-Elie Electroconductive hydrogels for biosensors, bionics and electrorelease devices” Symposium QQ: Conjugated Polymers in Sensing and Biomedical Applications. MRS Spring Meeting, San Francisco, CA, USA. April 1-5, 2013.* [LINK](#)

23. *Invited Address: Anthony Guiseppi-Elie "Molecular Bioelectronics: Direct Electron Transfer in Enzyme Biochips". Integrated Biosystems Lab, Intel Corp., San Jose, CA USA. April 4th, 2013.*
24. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Implantable Microsystems for the Management of Trauma" Faculty of Natural Sciences and Faculty of Medicine, University of the West Indies, St Augustine, Trinidad and Tobago. March 20th, 2013.*
25. *Invited Address: Anthony Guiseppi-Elie "Engineering in Medicine and Biology: Microsystems for Improved Health Outcomes" South Carolina Jr. Academy of Sciences Daniel High School. January 28, 2013.*

**2012**

26. *Plenary Address: Anthony Guiseppi-Elie Electroconductive hydrogels for biosensors, bionics and electrorelease devices" PolyTech- 2012, International Conference on Advances in Polymeric Materials and Nanotechnology Bharati Vidyapeeth University, Erandwane, Pune. December 15-17, 2012.*
27. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Engineering the Bio-Abio Interface of Implantable Microsystems to Allow Quantitative Measurement of Biomolecules for the Management of Hemorrhagic Shock" IEEE EMBS Distinguished Lecture, Qualcomm Microsystems Seminar Series, Institute for Systems Research (ISR), University of Maryland College Park, College Park, Maryland, USA. November 29, 2012.*
28. *Plenary Address: Anthony Guiseppi-Elie "Nano-enabled Low Cost Quantitative Lateral Flow Diagnostics" The CFK 2012 Scientific Conference, Speke Resort and Conference Center, Munyonyo, Kampala, Uganda. November 11 - 17, 2012.*
29. *Plenary Address: Anthony Guiseppi-Elie "The use of Carbon Nanotube -Enzyme Conjugates in the Fabrication of Diagnostic Biosensors" The CFK 2012 Scientific Conference, Speke Resort and Conference Center, Munyonyo, Kampala, Uganda. November 11 - 17, 2012.*
30. *Plenary Address: Anthony Guiseppi-Elie "The Technology Transfer: The Academic Entrepreneur's Perspective" The CFK 2012 Scientific Conference, Speke Resort and Conference Center, Munyonyo, Kampala, Uganda. November 11 - 17, 2012.*
31. *Invited Paper: Anthony Guiseppi-Elie "Engineering the Bio-Abio Interface to Enable Next Gen Bionics" Biomedical Engineering Society (BMES) Annual Meeting, 2012, Georgia World Congress Center, Atlanta, Georgia, USA. October 24-27, 2012*
32. *Invited Paper: Anthony Guiseppi-Elie "Biofabrication techniques for multi-analyte biosensors" Biomedical Engineering Society (BMES) Annual Meeting, 2012, Georgia World Congress Center, Atlanta, Georgia, USA. October 24-27, 2012*
33. *Invited Colloquium Presenter: Anthony Guiseppi-Elie "Engineering the Bio-Abio Interface to Enable Next Gen Bionics" IEEE EMBS Distinguished Lecture, Department of Electrical and Computer Engineering, University of South Florida, Tampa, Florida, USA. October 17, 2012.*
34. *Invited Paper: Anthony Guiseppi-Elie, Christian N. Kotanen, Olukayode Karunwei and A. Nolan Wilson "Engineering the Bio-Abio Interface to Enable Next Gen Bionics" First International Symposium on More-Than-Moore, 222 Meeting of the Electrochemical Society*

/ the 2012 Pacific Rim Meeting on Electrochemical and Solid-Sate Science (PRIME), Hawaii Convention Center and the Hilton Hawaiian Village Honolulu, Hawaii, USA. **October 7-12, 2012.**

35. *Invited Paper:* **Anthony Guiseppi-Elie** "Implantable Biochips: Challenges and Opportunities to Change Battlefield and Highway Trauma Outcomes" PRIME 2012, 222nd meeting of the Electrochemical Society, Hawaii Convention Center and the Hilton Hawaiian Village, Honolulu, Hawaii, USA. **October 07-12, 2012.**
36. *Plenary Address:* **Anthony Guiseppi-Elie** "Bionanotechnology: Integrating Nanostructures into Biomaterials" Society of Biomaterials, Biomaterials Day, Clemson University, Clemson South Carolina, USA. **September 29, 2012.**
37. *Plenary Address:* **Anthony Guiseppi-Elie** "Implantable Biochips: Challenges and Opportunities to Change Battlefield and Highway Trauma Outcomes" 17th Annual Transfronterera Meeting on Sensors and Biosensors, Universitat Rovira i Virgili, Barcelona, Spain. **September 20-21, 2012**
38. *Plenary Address:* **Anthony Guiseppi-Elie** "Implantable Biochips: Challenges and Opportunities to Change Battlefield and Highway Trauma Outcomes" Africa MRS, Victoria Falls, Zimbabwe. **December 14, 2011**
39. *Plenary Address:* **Olkayode Karunwi and Anthony Guiseppi-Elie** "SWNT-Glucose Oxidase Conjugates for Advanced Enzyme Biofuel Cells" 2nd International Symposium on E'Chem: E'Chem for Energy. Bellville, South Africa. **July 19 - 20, 2012.**
40. *Invited Paper:* **Anthony Guiseppi-Elie** "Electroconductive hydrogels for biosensors, bionics and electrorelease devices" The International Conference on Science and Technology of Synthetic Metals 2012 (ICSM 2012), Hyatt Regency Hotel, Atlanta, GA, USA. **July 08-13, 2012.**
41. *Invited Colloquium Presenter:* **Anthony Guiseppi-Elie** "Bioactive electroconductive hydrogels: Biosensors, bionics and electrorelease devices" Department of Polymer Chemistry, Moscow State University, Moscow, Russia. **June 21, 2012.**
42. *Poster Paper:* **Anthony Guiseppi-Elie**, Chenbo Dong and Cerasela Zoica Dinu "Cells on Hydrogels: Resolving the Role of Elastic Modulus" ICCA-LRI & UK Health Protection Agency Workshop: Technologies to Inform Chemical Safety Sciences. Budapest Marriott Hotel, Budapest, Hungary. **June 12-13, 2012.**
43. *Invited Paper:* **Anthony Guiseppi-Elie** "Bioactive electroconductive hydrogels: Biosensors, bionics and electrorelease devices" BIOSENSORS 2012 Convention Centre at the IBEROSTAR Cancun, Mexico. **May 15-18, 2012.**

## **2011**

44. *Plenary Address:* **Anthony Guiseppi-Elie** "Biotechnology applications of electroconductive hydrogels: Biosensors, bionics and electrorelease devices" "Materials in Electrochemistry: Syntheses and Applications" The 6th International Conference of the Africa Materials Research Society, Elephant Hills Hotel, Victoria Falls. Zimbabwe. **December 11-16, 2011.**
45. *Invited Presenter:* **Anthony Guiseppi-Elie** "Carbon nanotubes in biosensors and advanced biofuel cells" CSIR, Pretoria, South Africa. **December 9, 2011.**

46. *Invited Colloquium Presenter: Anthony Guiseppi-Elie* “Frontiers of More than Moore in Bioelectronics and the Required Metrology Needs”, Department of Biomedical Engineering, University of South Carolina, Columbia, South Carolina, USA. **November 9, 2011.**
47. *Invited Presenter: Christian N. Kotanen and Anthony Guiseppi-Elie* “Biotechnology applications of electroconductive hydrogels: Biosensors, bionics and electrorelease devices” Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
48. Olukayode Karunwi, Robert A. Latour, and Anthony Guiseppi-Elie “Single-walled carbon nanotube-glucose oxidase conjugates: Structure and bioactivity” Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
49. Subhra S. Nag, Sandy Deitch, Delphine Dean and Anthony Guiseppi-Elie “Biomimetic poly-(HEMA)-based hydrogels as bio-smart interface for intramuscular implantable biosensors” Southeast Regional Meeting of the ACS (SERMACS), Richmond, Virginia, USA. **October 26-29, 2011.**
50. *Invited Paper: Anthony Guiseppi-Elie* “Bioactive Electroconductive Hydrogels” Hybrid Biomaterials AIChE Annual Meeting, Minneapolis Convention Center Minneapolis, Minnesota, USA. **October 16-21, 2011.**
51. *Invited Presenter: Anthony Guiseppi-Elie* “Frontiers of More than Moore in Molecular Bioelectronics; Biosensors and Bionics” 2011 Fall WVNano Distinguished Colloquium Presentation University of West Virginia, West Virginia, USA. **September 30, 2011.**
52. Ann M. Wilson, Adilah Guiseppi-Wilson, Abdur Rub Abdur Rahman and Anthony Guiseppi-Elie “Microfabricated Chemically Sensitive Impedimetric Detectors for Low Cost Quantitative Lateral Flow Diagnostics” Electrochem 2011 International Year of Chemistry – Sensors for Africa University of Bath, Bath, England. **September 5-6, 2011.**
53. Christian N. Kotanen and Anthony Guiseppi-Elie “Implantable biochips for continuous monitoring of tissue hypoxia” Advanced Technology Applications for Combat Casualty Care (ATACCC) 2011, Fort Lauderdale, Fl, USA. **August 15-18, 2011.**
54. Andrew Nolan Wilson, Ruth Salas, Q-X Amy Sang and Anthony Guiseppi-Elie “Bioactive Hydrogels Demonstrate Mediated Release of a Chromophore by Chymotrypsin” Advanced Technology Applications for Combat Casualty Care (ATACCC) 2011, Fort Lauderdale, Fl, USA. **August 15-18, 2011.**
55. *Invited Presenter: Anthony Guiseppi-Elie* “Bioactive Electroconductive Polymers: Integrating One-dimensional Conductors with Hydrogels” 14th IUPAC International Symposium on MacroMolecular Complexes, MMC-14:2011, Department of Chemistry, University of Helsinki, Finland. **August 14-17, 2011.**
56. *Invited Colloquium Presenter: Anthony Guiseppi-Elie* “Frontiers of More than Moore in Molecular Bioelectronics” Integrated Sensors, Intelligent Systems (ISIS), Department of Electrical Engineering University of Calgary, Calgary, Canada. **August 8, 2011.**
57. *Invited Presenter: Anthony Guiseppi-Elie* “Bioelectronics and Bionics: Implantable Diagnostic Biochip for the Management of Trauma-induced Hemorrhage” US-Russian Workshop on “Emerging Trends in Bioelectronics” Electrical, Communications and Cyber System Division and the Office of International Science and Engineering, National Science

Foundation (NSF) and Russian Academy of Sciences (RAS), St. Petersburg Academic University, St. Petersburg. **June 27-28, 2011**

58. Subhra Nag, Rachel Khan, Pankaj Vadgama and Anthony Guiseppi-Elie "Cells on Hydrogels: Toward Whole Cell Bioassays" ICCA-LRI & Health Canada Workshop: Advancing Exposure Science to Improve Chemical Safety. Hotel Palace Royal, Québec City, Canada. **June 22-23, 2011.**
59. *Contributed Paper:* Anthony Guiseppi-Elie "Bioactive and Responsive Hydrogels: Integration of Biocompatibility, Molecular Recognition and Signal Transduction" *Proceedings of the 2011 Frontiers In Polymer Science*. Centre de Congrès, Lyon, France. **May 29-31, 2011.**
60. *Invited Keynote Presenter:* Anthony Guiseppi-Elie "Frontiers of More than Moore in Bioelectronics and the Required Metrology Needs" 2011 International Conference on Frontiers of Characterization and Metrology for Nanoelectronics. MINATEC Campus in Grenoble, France. **May 23 - 26, 2011.**
61. *Invited Workshop Presenter:* Anthony Guiseppi-Elie "An Implantable Biochip to Influence Patient Outcomes Following Trauma-induced Hemorrhage" *Security and Privacy in Implantable Medical Devices* (SPIMD 2011). École Polytechnique Fédérale de Lausanne (EPFL), ELA2, Lausanne, Switzerland. **April 1, 2011.**
62. Rachel M. Snider, Anthony Guiseppi-Elie, Sarah Strycharz-Glaven, Leonard Tender, "On the conductive nature of biofilms of *Geobacter sulfurreducens*" BIOT Division \ 241st American Chemical Society Meeting & Exposition, Anaheim, California, USA. **March 27-31st, 2011.**
63. *Invited Panel Presenter:* Anthony Guiseppi-Elie "Improving Resuscitation and Reanimation Decisions with an Implantable Diagnostic Biochip" Innovation and Translation in Medical and Biological Engineering AIMBE 20<sup>th</sup> Annual Event. Mandarin Oriental Hotel Washington, DC, USA. **February 20-23, 2011.**

## **2010**

64. *Invited Colloquium Presenter:* Anthony Guiseppi-Elie "Improving Resuscitation and Reanimation Decisions with an Implantable Diagnostic Biochip" Department of Biomedical Engineering, Florida International University. **January 28<sup>th</sup>, 2011**
65. *Invited Presenter:* Anthony Guiseppi-Elie "Implantable multi-analyte biosensors enabled by electroconductive hydrogels" SEAM 2010, Polytechnic Institute of New York University, Brooklyn, New York. **December 4<sup>th</sup>, 2010**
66. *Contributed Paper:* Christian Kotanen and Anthony Guiseppi-Elie "An Implantable Biosensor for Hemorrhage Monitoring in a Small Vertebrate Animal Model" *Proceedings of the Southeast Biomedical Engineering Career Conference*. Clemson University, Clemson, South Carolina. **October 29 2010.**
67. *Contributed Paper:* Christian Kotanen and Anthony Guiseppi-Elie "Bioactive Electroconductive Hydrogels as Hosting Membranes for Enzyme-based Biosensors" Proceedings of the Biomedical Engineering Society Annual Meeting Devices: Nano to Micro -- Biosensors, Bio-Interfaces and Implantable Devices, BMES 2010, Austin Convention Center, Austin, Texas. **October 6-9, 2010.**

68. *Invited Panelist:* Anthony Guiseppi-Elie "Technology Transfer: The Academic Entrepreneur's Perspective". Pre-conference Workshop on Industry-Academia-Clinician Collaboration for Medical Innovation: Reinventing the Wheel. 2010 BMES Annual Meeting, Austin Convention Center, Austin, TX. **October 6<sup>th</sup>, 2010.**
69. *Colloquium Address in Clinical Medicine:* Anthony Guiseppi-Elie, "An Implantable Biochip to Influence Outcomes following Trauma-induced Hemorrhage". Department of Clinical Investigation, Tripler Army Medical Center, Honolulu, Hawaii. **September 14<sup>th</sup>, 2010.**
70. *Invited Lecture and Paper:* Christian Kotanen and Anthony Guiseppi-Elie, **Resuscitation and Reanimation Decisions could benefit from an Implantable Diagnostic Biochip during Trauma-induced Hemorrhage.** Faraday Discussion 149: Analysis for Healthcare Diagnostics and Theranostics. University of Edinburgh, Edinburgh, United Kingdom. **September 6 - 8, 2010.**
71. *Contributed Paper:* Christian Kotanen and Anthony Guiseppi-Elie "Bioactive electroconductive hydrogels". Symposium on **Bio-related Polymers: Proceedings of the Fall 2010 American Chemical Society (ACS); Polymers Division.** Boston, Massachusetts, USA. **August 24-26, 2010.**
72. *Contributed Paper:* Christian Kotanen and Anthony Guiseppi-Elie "An Implantable Biochip to Influence Patient Outcomes Following Trauma-induced" *Proceedings of the Advanced Technology for Combat Casualty Care (ATACCC 2010) Conference.* Tradewinds Beach Resort, St. Pete Beach, Florida 33706. **August 16-19, 2010.**
73. **Christian Kotanen** and Anthony Guiseppi-Elie "Demonstration of Implantable Biochip System for Intramuscular Monitoring of Lactate and Glucose during Trauma Induced Hemorrhage" *Proceedings of the Advanced Technology for Combat Casualty Care (ATACCC 2010) Conference.* Tradewinds Beach Resort, St. Pete Beach, Florida 33706. **August 16-19 2010.**
74. *Keynote Lecture:* Anthony Guiseppi-Elie, "Electroconductive Hydrogels: Bioactive and Bio-smart Polymers". 2<sup>nd</sup> Asia-Pacific Symposium on Nanobionics. The University of Wollongong, Wollongong, Australia. **June 9-11, 2010.**
75. *IP Disclosure:* Anthony Guiseppi-Elie, **An Implantable Biochip to Influence Patient Outcomes Following Trauma-induced Hemorrhage: The PSMBioChip<sup>SM</sup>.** CU IP Review Committee Disclosure Presentation. Clemson University, Clemson, South Carolina, USA. **June 1<sup>st</sup>, 2010.**
76. *Invited Lecture:* Anthony Guiseppi-Elie, "Engineering the Electrode-Tissue Interface of Implantable Biochips." CMOS 2010 Emerging Technologies Workshop. Whistler, British Columbia, Canada. **May 19-21, 2010.**
77. *Invited Lecture:* Anthony Guiseppi-Elie, **"Perspectives in Nano-Bio-Electronics in Human Health."** National Institute of Standards and Technology (NIST), Semiconductor Electronics Division (SED), Program in Bioelectronics. Gaithersburg, Maryland, USA. **May 6<sup>th</sup>, 2010.**
78. *Colloquium Address:* Anthony Guiseppi-Elie, **Nano-Bio in Human Health: The Good, the Bad and the Unpredictable.** Department of Nanoengineering , University of California, San Diego . **March 17<sup>th</sup>, 2010.**
79. *Invited Paper:* Anthony Guiseppi-Elie, Lorcan Ingham, Lauren Koch and Gary E. Wnek, **Impedimetric Characterization of Temperature Responsive p(HEMA)-PEG-HMMA**

- Hydrogels.** Institute of Biological Engineering (IBE), 2010 Annual Conference. Cambridge, MA, USA. **March 4 - 6<sup>th</sup>, 2010.**
80. *Colloquium Address:* Anthony Guiseppi-Elie, "Electroconductive Hydrogels: Bioactive and Bio-smart Polymers in Implantable Biosensors, Electrostimulated Release Devices and Deep Brain Stimulation Electrodes." Department of Chemical and Environmental Engineering, University of California, Riverside, CA, USA. **February 19<sup>th</sup>, 2010.**
81. *Colloquium Address:* Anthony Guiseppi-Elie, **Engineering the Electrode-Tissue Interface with Electroconductive Hydrogels.** Center for Functional Nanoscale Materials (CFNM), Clark-Atlanta University, Atlanta, GA, USA. **February 9<sup>th</sup>, 2010.**
82. *Invited Paper:* Anthony Guiseppi-Elie, **Electroconductive Hydrogels: Bioactive and Bio-smart Polymers in Implantable Biosensors, Electrostimulated Release Devices and Deep Brain Stimulation Electrodes.** National Science Foundation Mauritius – USA Workshop on Biomaterials, University of Mauritius, Mauritius. **November 30<sup>th</sup> - December 4<sup>th</sup>, 2009.**
83. *Discussion Leader:* Anthony Guiseppi-Elie, **BIOELECTROCHEMISTRY.** 2010 Gordon Research Conference (GRC) on **Electrochemistry**. Chair: Stephen Creager, Vice Chair: Daniel A. Scherson Four Points Sheraton / Holiday Inn Express, Ventura, California, USA. **January 10-15, 2010.**
84. *Colloquium Address:* Anthony Guiseppi-Elie, **Engineering the Electrode-Tissue Interface with Electroconductive Hydrogels.** Department of Biomedical Engineering, University of Texas at Austin, Texas, USA. **November 19<sup>th</sup>, 2009**
85. *Invited Paper:* Anthony Guiseppi-Elie "An Implantable Biochip to Influence Outcomes in Trauma-induced Hemorrhage", The 25<sup>th</sup> Annual Meeting, The American Society for Gravitational and Space Biology, Raleigh, North Carolina, USA. **November, 5-8, 2009.**
86. *Colloquium Address:* Anthony Guiseppi-Elie "Electroconductive Hydrogels: Bioactive and Bio-smart Polymers in Implantable Biosensors, Electrostimulated Release Devices and Deep Brain Stimulation Electrodes" Biomanufacturing Research Institute and Technology Enterprise (BRITE), Departments of Chemistry and Pharmaceutical Sciences, North Carolina Central University (NCCU), North Carolina, USA. **November 7<sup>th</sup>, 2009.**
87. *Colloquium Address:* Anthony Guiseppi-Elie, "Electroconductive Hydrogels: Biomimetic Interfaces of Implantable Biosensors, ESDR Devices and DBS Electrodes", Department of Chemistry and Biochemistry Florida State University, Tallahassee, Florida, USA. **October 30th, 2009.**
88. *Invited Paper:* Anthony Guiseppi-Elie, "Electroconductive Hydrogels: Biomimetic Interfaces of Implantable Biosensors, ESDR Devices and DBS Electrodes" 216th Electrochemical Society (ECS) Meeting. Vienna, Austria. **October 4 -9, 2009.**
89. *Keynote Lecture:* Anthony Guiseppi-Elie, "Physiologic Status Monitoring Using Implantable Biochips: From Molecular through Systems Engineering" Institute for Materials Research (IMR) Materials Week Symposium. Ohio State University, Ohio, USA. **September 3<sup>rd</sup>, 2009.**
90. *Invited PI Paper:* Anthony Guiseppi-Elie, "Implantable Molecular Diagnostics: A Tool in the Management of Battlefield Hemorrhage." Department of Defense (DOD) Military Health Research Forum (MHRF). Hallmark Crown Center, Kansas City, Missouri, USA. **August 31 - September 3, 2009.**

91. *Discussion Leader: Anthony Giuseppi-Elie, MOLECULAR MEDIATION OF TISSUES AND CELLS.* 2009 Gordon Research Conference (GRC) on **Biomaterials: Biocompatibility / Tissue Engineering The Engineering of Healing: From Molecular Mediation to Tissue Constructs**, Chair: William M. Reichert, Vice Chair: Joyce Y. Wong. Holderness School Holderness, New Hampshire, USA. **July 19-24, 2009**.
92. *Participant Paper: Anthony Giuseppi-Elie, "Advanced Concepts in the Design of Neural Electrodes for Deep Brain Stimulation"* Clemson MUSC Collaboration on Clemson, South Carolina, USA.
93. *Invited Lecture: Anthony Giuseppi-Elie, Electroconductive Hydrogels: Co-networks of Poly(HEMA-co-PEGMA-co-HMMA-co-MPC) and Polypyrrole for Implantable Biochips and Deep Brain Stimulation Electrodes.* The 5th International Conference on Materials for Advanced Technologies (ICMAT 2009) and International Union of Materials Research Societies' International Conference in Asia (IUMRS-ICA 2009). GEM4 Conference on Cancer. Singapore Suntec, Singapore International Convention & Exhibition Centre. The Materials Research Society of Singapore, Singapore. **June 28 -July 3<sup>rd</sup>, 2009**.
94. *Colloquium Address: Anthony Giuseppi-Elie, "An Implantable Biochip for Physiologic Status Monitoring: From Molecular to Systems Engineering."* Department of Chemical Engineering, University of Illinois, Chicago. **April 30<sup>th</sup>, 2009**.
95. *Invited Lecture: Anthony Giuseppi-Elie, Physiologic Status Monitoring Using Implantable biochips: From Battlefield to Cardiac Surgery.* South Carolina Bioengineering Symposium, Metropolitan Convention Center, Columbia, South Carolina, USA. April 14-15, 2009
96. *Keynote Paper: Anthony Giuseppi-Elie, An Implantable Biochip for Physiologic Status Monitoring During Hemorrhage and Shock.* *Symposium on Biomedical Microdevices and Diagnostics II.* Annual Meeting of the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. March 19-21, 2009.
97. *Contributed Paper: Gusphyl A Justin, Abdur Rub Abdur Rahman, and Anthony Giuseppi-Elie.* "Electrochemical Characterization and In Vitro Biocompatibility of a Poly(HEMA)-Polypyrrole Conducting Hydrogel Membrane for Implantable Biosensors and Neural Tissue Electrodes." *Symposium on Biomedical Microdevices and Diagnostics II.* Annual Meeting of the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. **March 19-21, 2009**.
98. *Contributed Paper: Abdur Rub Abdur Rahman, Gusphyl A Justin and Anthony Giuseppi-Elie* "Fabrication, packaging and testing of an implantable biochip for physiologic status monitoring." *Symposium on Biomedical Microdevices and Diagnostics II.* Annual Meeting of the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. **March 19-21, 2009**.
99. *Contributed Paper: Ali Boztas and Anthony Giuseppi-Elie.* "Transport of Ferrocene Monocarboxylic Acid through p(HEMA)-PEG Hydrogels." *Symposium on Biology-Inspired Sensors.* Annual Meeting of the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. **March 19-21, 2009**.
100. *Contributed Paper: Atanu Sen and Anthony Giuseppi-Elie Aging Membrane Response of Enzyme Containing p(HEMA)-based Hydrogels.* *Symposium on Biology Inspired Materials and Molecular Engineering and Biomimetics: Engineering Based on Biology.* Annual Meeting of

the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. **March 19-21, 2009.**

101. *Contributed Paper:* Meng Zhang and Anthony Giuseppi-Elie. "PEGylation of GOx and LOx" *Symposium on Biology Inspired Materials and Molecular Engineering and Biomimetics: Engineering Based on Biology.* Annual Meeting of the Institute of Biological Engineering (IBE2009); Santa Clara Marriott, Santa Clara, California, USA. **March 19-21, 2009.**
102. *Invited Paper:* Gusphyl Justin and Anthony Giuseppi-Elie, **An Implantable Biochip for Physiologic Status Monitoring During Hemorrhage and Shock.** The 13th International Conference on Search For Electroactive materials (SEAM 2008). Polytechnic Institute, Brooklyn, New York, USA. December 12<sup>th</sup>, 2008.
103. *Invited Keynote Lecture:* Anthony Giuseppi-Elie, **Immobilized Carbon Nanotubes for Direct Bioelectrochemistry and Amperometric Biosensors.** The 13th International Conference on Biomedical Engineering (ICBME2008), Singapore. December 3-6, 2008.
104. *Invited Keynote Lecture:* Anthony Giuseppi-Elie, "An Implantable Biochip for Physiologic Status Monitoring During Hemorrhage and Shock." The 13th International Conference on Biomedical Engineering (ICBME2008), Singapore. December 3-6, 2008.
105. *Contributed Paper:* Anthony Giuseppi-Elie "Biotransducers of Hydrogel-coated Microdisc Electrode Arrays for Implantable Biochips used for In-vivio Biomedical Monitoring." Device: Nano-Micro Symposium, Biomedical Engineering Society (BMES) 2008 Annual Fall Meeting, St. Louis Missouri, USA. **October 2-4, 2008.**
106. *Contributed Paper:* Abdur Rub Abdur Rahman, Gusphyl Justin and Anthony Giuseppi-Elie "Dynamic Electrochemical Simulations of Biotransducers based on Microdisc Electrode Arrays." Device: Nano-Micro Symposium, Biomedical Engineering Society (BMES) 2008 Annual Fall Meeting, St. Louis Missouri, USA. **October 2-4, 2008.**
107. *Contributed Paper:* Ashwin Rao, Liju Yang and Anthony Giuseppi-Elie. "Electrochemical Characterization of Interdigitated Microsensors Electrodes (IME) Used for In-vivo Biomedical Applications." Device: Nano-Micro Symposium, Biomedical Engineering Society (BMES) 2008 Annual Fall Meeting, St. Louis Missouri, USA. **October 2-4, 2008.**
108. *Contributed Paper:* Gusphyl Justin, Abdur Rub Abdur Rahman, and Anthony Giuseppi-Elie "Bioactive electrically conducting hydrogels for implantable biosensors and DBS electrodes." Device: Nano-Micro Symposium, Biomedical Engineering Society (BMES) 2008 Annual Fall Meeting, St. Louis Missouri, USA. **October 2-4, 2008.**
109. *Colloquium Address:* Anthony Giuseppi-Elie, "Electroconductive Hydrogels: Stimuli Responsive Polymers for Biomedical Applications." Graduate Program of the University of Georgia, Athens, Georgia, USA. **September 25<sup>TH</sup>, 2008.**
110. *Contributed Paper:* Anthony Giuseppi-Elie, "A Lactate Biosensor for Cardiac Care." C3B Mini Symposium, Clemson Advanced materials Research Center, Anderson, South Carolina, USA. **September 19th, 2008.**
111. *Invited Lecture:* Anthony Giuseppi-Elie, "Electroconductive Hydrogels: Stimuli Responsive Polymers for Implantable Biosensors." 4th IUPAC-sponsored, International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-08): Synthesis, Properties, and Applications. Düsseldorf, Germany. **September 7-11. 2008.**

112. *Keynote Lecture:* Anthony Guiseppi-Elie, "Immobilized Carbon Nanotubes for Direct Bioelectrochemistry and Amperometric Biosensors." 1st International Symposium on Electrochemistry (**ElectroChemSA2008**) University of Western Cape, Cape Town, South Africa. **July 9-11, 2008.**
113. *Contributed Paper:* Abdur Rub Abdur Rahman, Gusphyl A. Justin and Anthony Guiseppi-Elie "Electrochemical Characterization of Implantable Biochips for Biosensing Application" **Engineering Microfabricated Biodevices** Annual Meeting of the Institute of Biological Engineering (IBE) Sheraton Hotel, Chapel Hill, North Carolina. **March 6-9, 2008.**
114. *Contributed Paper:* Gusphyl A. Justin, Abdur Rub Abdur Rahman and Anthony Guiseppi-Elie "Bioactive Hydrogels for Implantable Biosensors" **Engineering Microfabricated Biodevices** Annual Meeting of the Institute of Biological Engineering (IBE) Sheraton Hotel, Chapel Hill, North Carolina. March 6-9, 2008.
115. *Invited Lecture:* Anthony Guiseppi-Elie, "Immobilized Carbon Nanotubes for Amperometric Biosensors" Biology-Inspired Sensors Annual Meeting of the Institute of Biological Engineering (IBE) Sheraton Hotel, Chapel Hill, North Carolina. **March 6-9, 2008.**
116. *Invited Lecture:* Anthony Guiseppi-Elie, "Engineering Implantable Biochips for Biomedical Monitoring" **Engineering Microfabricated Biodevices**, Annual Meeting of the Institute of Biological Engineering (IBE) Sheraton Hotel, Chapel Hill, North Carolina. **March 6-9, 2008.**
117. *IBN BioNanoMaterials Award Lecture* Anthony Guiseppi-Elie, "Biomimetic Electroconductive Hydrogels: Biologically Inspired Co-networks of Polypyrrole and Poly(hydroxyethyl methacrylate) containing poly (ethylene glycol) and phosphorylcholine for Implantable Biochips" Institute of Bioengineering and Nanotechnology (IBN), 31 Biopolis Way, Singapore 138669. **December 12<sup>th</sup>, 2007.**
118. *Invited Paper:* Stephen Finley, Walter Torres and Anthony Guiseppi-Elie "Biomimetic Electroconductive Hydrogels: Biologically Inspired Co-networks of Polypyrrole and Poly(hydroxyethyl methacrylate) containing poly (ethylene glycol) and phosphorylcholine" Symposium QQ Fall MRS Fall 2007 Meeting, Boston, MA. November 26-30, 2007.
119. *Contributed Paper:* J.-Y. Shin, D. Debnath, W.-S. Lee, C. R. Kim, A. Guiseppi-Elie, and K. E. Geckeler, **Synthesis and Characterization of Single-Walled Carbon Nanotube-Polypyrrole Nanocomposites with a High Electrical Conductivity**. NAIST-GIST Joint Symposium on Advanced Materials, Gwangju, South Korea. November 22-23. 2007.
120. *Contributed Paper:* Gusphyl Justin, Kurt E. Geckeler and Anthony Guiseppi-Elie. **Bioactive and Biomimetic Hydrogel Membranes for Implantable Biosensors and Deep Brain Stimulating Electrodes.** Nanotechnology in Biology and Medicine, Cannon Research Center Auditorium Carolinas Medical Center, 1542 Garden Terrace Drive Charlotte, North Carolina 28203, USA. November 5<sup>th</sup>, 2007.
121. *Contributed Paper:* Bryan G. Splawn and Anthony Guiseppi-Elie, **Detecting DNA Hybridization Within Microflows Using an Interdigitated Microsensor Electrode and Ferrocene as an Electroactive Ligand.** The 2007 South East Regional Meeting of the American Chemical Society (SERMACS 2007), Greenville, South Carolina, USA. October 24-27, 2007.

122. *Invited Lecture: Anthony Giuseppi-Elie, Development of an Intramuscular Lactate and Glucose Biochip for Physiologic Status Monitoring During Hemorrhage and Shock.* TATRC'S INTEGRATED RESEARCH TEAM (IRT) MEETING "Nanotechnology Solutions for the Development of Long-term Implantable Devices" Institute for Molecular Medicine, University of Texas Health Science Center, Houston, Texas, USA. October 23 - 25, 2007.
123. *Contributed Paper: J.-Y. Shin, D. Debnath, W.-S. Lee, D. Nepal, A. Giuseppi-Elie, and K. E. Geckeler, Synthesis of Uniformly Shaped Single-Walled Carbon Nanotube-Polypyrrole Nanocomposites.* 3rd International Materials Symposium, Hsinchu, Taiwan. October 21-24, 2007. Book of Abstracts, p. 54.
124. *Invited Lecture: Anthony Giuseppi-Elie, Recent Developments in Bio-smart and Responsive Materials For Biosensors.* Emerging Technologies to Enable Quantitative Rapid Tests, Hyatt Islandia Hotel San Diego, California, USA. September 24 - 26, 2007.
125. *Colloquium Address: Anthony Giuseppi-Elie, Bioactive and Biomimetic Hydrogel Membranes for Implantable Biosensors and Stimulating Electrodes.* Presented at the Chemistry Colloquium Series, Department of Chemistry, Old Dominion University, Norfolk, Virginia. September 21st, 2007.
126. *Colloquium Address: Anthony Giuseppi-Elie, Bioactive and Biomimetic Hydrogel Membranes for Implantable Biosensors and Stimulating Electrodes.* Presented to the Research Staff, "Milliken Research Corporation", Spartanburg, Virginia, USA. September 13th, 2007.
127. *Invited Lecture: Anthony Giuseppi-Elie, "Clinical Diagnostics Using Electroconductive Bio-Smart Thin Film Biosensors"* Department of Biomedical Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania, USA. June 28, 2007.
128. *Invited Lecture: Anthony Giuseppi-Elie, "On Biomedical Engineering Scholarship and Service: The Academic Entrepreneur's Perspective"* Biomedical Engineering Department, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA. June 27, 2007.
129. *Invited Lecture: Anthony Giuseppi-Elie "Technology Transfer: The Academic Entrepreneur's Perspective"* ASME-BED Summer Bioengineering Conference, AIMBE Panel on Technology Transfer, Keystone, Colorado, USA. June 20 - 23, 2007.
130. *Invited Lecture: Anthony Giuseppi-Elie "Molecular Diagnostics and Bioanalytics: Research at the Center for Bioelectronics, Biosensors and Biochips (C3B)" South Carolina Bioengineering Summit, Charleston, South Carolina, USA.* June 14-15, 2007.
131. *Invited Lecture: Anthony Giuseppi-Elie ""Bioactive and Biomimetic Hydrogel Membranes for Implantable Biosensors and Stimulating Electrodes "* ACS-IUPAC Conference on "Macromolecules for a Sustainable, Safe and Healthy World", Brooklyn, New York, USA. June 10 - 13, 2007.
132. *Invited Lecture: Anthony Giuseppi-Elie "Bioactive Hydrogels"* National Institute of Science and Technology (NIST), Gaithersburg, Maryland, USA. June 1, 2007.
133. *Keynote Lecture: Anthony Giuseppi-Elie "Bio-smart Organic Thin Films for Implantable Biosensors"* American Vacuum Society (AVS) Annual Meeting, Ann Harbor, Michigan. May 9th, 2007.

134. *Invited Lecture:* Walter Torres and Anthony Guiseppi-Elie "Biotechnical Aspects of Conducting Polymers: Biosensors, Biochips and Biocompatibility" **30 Years of Conducting Polymers, American Chemical Society 233rd National Meeting & Exposition**, Chicago, Illinois, USA. March 25-29, 2007. *Polymer Preprints. Volume 48. Number 1. March 2007.* Paper presented at the ACS meeting held Chicago, IL, 25th-30th March 2007; Washington, D.C., ACS, Division of Polymer Chemistry, 2007, p.5-6, CD-ROM, 012.
135. *Invited Lecture:* Anthony Guiseppi-Elie "Electroconductive Hydrogels for an Implantable Biosensor useful in Trauma Management" **2007 International Workshop on Biomaterials and Nanomaterials**, Gwangju Institute of Science and Technology (GIST), Gwangju, Korea. February 22-23, 2007.
136. *Invited Lecture:* Anthony Guiseppi-Elie "Electroconductive Hydrogels for an Implantable Biosensor useful in Trauma Management" **Biomaterials Colloquium, Korea Institute of Science and Technology (KIST), Seoul, Korea**. February 21, 2007.
137. *Invited Lecture:* Anthony Guiseppi-Elie "Research in the Center for bioelectronics, biosensors and Biochips" **Graduate Research Colloquium, Inha University, Incheon, Korea**. February 20, 2007.
138. *Invited Lecture:* Anthony Guiseppi-Elie "Nanobiotechnology Research at the Center for Bioelectronics, Biosensors and Biochips (C3B)" **Clemson University AIChE Student Chapter**, Clemson University. November 28th, 2006.
139. *Invited Lecture:* Anthony Guiseppi-Elie "Nanobiotechnology Research at the Center for Bioelectronics, Biosensors and Biochips (C3B)" **US - Ireland R&D Partnership 2 DAY NANOTECHNOLOGY WORKSHOP**, Ramada Hotel, Shaw's Bridge, Belfast , Ireland October, 23 - 24, 2006.
140. *Invited Lecture:* Walter Torres and Anthony Guiseppi-Elie "**Biosensors for Molecular Diagnostics**" October 22, 2006
141. *Invited Lecture:* Jang B. Rampal and Anthony Guiseppi-Elie, "Practical Approaches to Microarrays for Diagnostics" A "**Hands-on" Microarray Workshop**", Sheraton Crystal City, Arlington, Virginia, USA. September 19-21, 2006.
142. *Invited Lecture:* Anthony Guiseppi-Elie, "Practical Approaches to Biosensors for Diagnostics" A "**Hands-on" Microarray Workshop**", Sheraton Crystal City, Arlington, Virginia, USA. September 19-21, 2006.
143. *Invited Lecture:* Anthony Guiseppi-Elie, "**Biosensors: Principles and Contemporary Issues 7th International Symposium on Bio-related Polymers**", 232nd National American Chemical Society Meeting, San Francisco, California, USA. September 10-14, 2006.
144. *Invited Lecture:* Anthony Guiseppi-Elie, "Biomimetic hydrogels for *in vivo* biosensor biocompatibility" **Polymers in Biosensors and Biochips: Diagnostic Tools and Assays** 232nd National American Chemical Society Meeting, San Francisco, California, USA. September 10-14, 2006.
145. *Invited Lecture:* Anthony Guiseppi-Elie "Chemically Modified Carbon Nanotubes for Amperometric Biosensing" **3rd IUPAC International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-06): Practical Nano-Chemistry and Novel Approaches**. Waseda University, Tokyo, Japan. On May 28 – June 1, 2006.

146. *Invited Lecture:* Anthony Guiseppi-Elie "An Implantable Biochip for Remote Monitoring of Glucose and Lactate in the Combat Trauma Victim" at the **DoD Military Health Research Forum for the Peer Reviewed Medical Research Program (PRMRP)**, San Juan, Puerto Rico. May 1-4, 2006.
147. *Invited Poster and Technology Demonstration:* Anthony Guiseppi-Elie "An Implantable Biochip for Remote Monitoring of Glucose and Lactate in the Combat Trauma Victim" at the **DoD Military Health Research Forum for the Peer Reviewed Medical Research Program (PRMRP)**, San Juan, Puerto Rico. May 1-4, 2006.
148. *Keynote Lecture:* Anthony Guiseppi-Elie, **Biosensor Principles: What are they and how do they work?** The 1<sup>st</sup> Asia Biosensor and Biochip "Hands-on" Workshop Organized by GENE Co., Ltd. and Gene Tech (Shanghai) Co., Ltd. Beijing and Shanghai, Peoples Republic of China. April 6, 2006.
149. *Colloquium Address:* Anthony Guiseppi-Elie "An Implantable Biochip for Telemetered Monitoring of Glucose and Lactate in the Combat Trauma Victim" Presented at the Physics Colloquium Series, Department of Physics, University of South Florida, Florida. **October 7th, 2005.**
150. *Colloquium Address:* Anthony Guiseppi-Elie "An Implantable Biochip for Telemetered Monitoring of Glucose and Lactate in the Combat Trauma Victim" Presented at the CBIMMS/CBTE Seminar Series, Pratt School of Engineering, Duke University, Raligh, North Carolina. **September 22, 2005.**
151. Anthony Guiseppi-Elie "Molecularly Engineered p(HEMA)-based Hydrogels Possessing Poly(Ethylene Glycol) and Phosphorylcholine For Implant Biocompatibility" Presented at the 27th Annual International Conference of the IEEE Engineering In Medicine and Biology Society (EMBC'05) (*12.5.1 Biomaterials and Biological Interfaces I*), Conference Center, Shanghai, China. **September 1-5, 2005.**
152. Sheena Abraham, Sean Brahim, and Anthony Guiseppi-Elie "Molecularly Engineered Hydrogels for Implant Biocompatibility". Presented at: ATACCC 2005 Conference; Tradewinds Island Grand Resort, St. Pete Beach, Florida. **August 15-17, 2005.**
153. Sean Brahim, Gopakumar Sethuraman, Sheena Abraham, and Anthony Guiseppi-Elie "Novel Microdisc Electrode Array (MDEA) Biochip Sensor for Monitoring of Glucose and Lactate". Presented at: ATACCC 2005 Conference, Tradewinds Island Grand Resort, St. Pete Beach, Florida. **August 15-17, 2005.**
154. Anthony Guiseppi-Elie, Kevin Ward, Sean Brahim, Wayne Barbee, Robert Dieglemann, Sheena Abraham, Daniel Contaifer, Robert Klenke and Peter Hansen "An Implantable Biochip for Telemetered Monitoring of Glucose and Lactate in the Combat Trauma Victim" Presented at: ATACCC 2005 Conference, Tradewinds Island Grand Resort, St. Pete Beach, Florida. **August 15-17, 2005.**
155. *Expert Panel Presentation:* Anthony Guiseppi-Elie "QA and QC Issues in Gene Expression Analysis Using Oligonucleotide Microarrays" Webex Seminar, Science Info. **May 20th, 2005.**
156. *Invited Paper:* Anthony Guiseppi-Elie "**Bio-inspired Organic Thin Films: Biosensors and Biocompatibility**" 2005 U.S. Army Workshop on Advanced Active Thin Film Materials for the Next Generation of Meso-Micro Scale Army Applications, Hilton Sandestin, Destin, FL. **May 10-12, 2005.**

157. Anthony Giuseppi-Elie "Intelligent Electronic NOSE for Physiologic Status via Patient Breath Monitoring Following Trauma" 2005 U.S. Army Workshop on Advanced Active Thin Film Materials for the Next Generation of Meso-Micro Scale Army Applications, Hilton Sandestin, Destin, FL. May 10-12, 2005.
158. *Keynote Address:* Anthony Giuseppi-Elie "What's all the Fuss about Small Stuff" Presented at the Virginia Space Grant Consortium Annual General Meeting, Hotel, Norfolk, Virginia. Friday, April 1st, 2005.
159. *Colloquium:* Anthony Giuseppi-Elie "Molecular Engineering in an Era of Nano and Bio" Department of Biomolecular Engineering, Baskin School of Engineering, University of California Santa Cruz. **March 21st, 2005.**
160. *Colloquium:* Anthony Giuseppi-Elie, "Brain Tumor Biochip: Fully Integrated Platform for the Clinical Classification of Primary Brain Tumors" Biomedical Engineering Seminar, Virginia Commonwealth University, Richmond, VA USA. March 08th, 2005.
161. *Keynote Address:* Anthony Giuseppi-Elie "Engineering in an Era of Nano and Bio" Richmond Joint Engineers Council Annual General Meeting, Jefferson Hotel, Richomond, Virginia. **February 24th, 2005.**
162. Anthony Giuseppi-Elie "Brain Tumor Biochip: Fully Integrated Platform for the Clinical Classification of Primary Brain Tumors" VCU School of Engineering Research Retreat. **January 2005.**
163. Anthony Giuseppi-Elie "An Implantable Biochip for Telemetered Monitoring of Glucose and Lactate in the Combat Trauma Victim". Presented at the IEEE Richmond Section Meeting,; Hilton Garden Inn, Glen Allen, Virginia, USA. **January 5th, 2006.**
164. Anthony Giuseppi-Elie, Kevin Ward, Sean Brahim, Wayne Barbee, Robert Dieglemann, Sheena Abraham, Daniel Contaifer "An Implantble Biochip for Combat Casualty Care" DoD PRMRP Product Assessment and Commercialization Team. **November 8th, 2004.**
165. *Colloquium:* Anthony Giuseppi-Elie "Electroconductive Hydrogels: "Bio-smart" Polymers for Implantable Biosensors" Department of Chemical Engineering, Clemson University, Clemson, SC, USA. **October 28th, 2004.**
166. Sheena Abraham, Sean Brahim and Anthony Giuseppi-Elie "Molecularly Engineered Hydrogels for Implant Biocompatibility" 26th Annual Int. Conference of the IEEE EMBS Track 12.5 : Biomaterials for Tissue Engineering. San Francisco, CA, USA. **September 1-5, 2004.**
167. Sheena Abraham, Sean Brahim and Anthony Giuseppi-Elie "Molecularly Engineered Hydrogels for Implant Biocompatibility 6th International Biorelated Polymers Symposium" 228 ACS National Meeting. Philadelphia, PA, USA. August 22-26th, 2004.
168. Anthony Giuseppi-Elie "Microarray Basics" Bioinformatics and Bioengineering Summer Institute, VCU Life Sciences, Virginia Commonwealth University Richmond, VA, USA. **August 13-15th, 2004.**
169. *Invited Paper:* James Landers, Pamela Norris, Godwin Mbagwu and Anthony Giuseppi-Elie "Fully Integrated Biochip System For BioDefense" 2004 Virginia Nanotechnology Showcase: Exploring Research & Commercialization in Nanomanufacturing. Charlottesville, VA, USA. **June 22-23, 2004.** Arvind K. Srivastava and Anthony Giuseppi-Elie "A Novel

- Technique for the Impedimetric Measurement of Chemoresistive VOC Sensor" 2004 Virginia Nanotechnology Showcase: Exploring Research & Commercialization in Nanomanufacturing. Charlottesville, VA, USA. **June 22-23, 2004.**Anthony Guiseppi-Elie "Bioelectronic Detection of DNA Hybridization and Development of a Low Density DNA Microarray for Clinical Classification of Brain Tumors" Cambridge Healthtech Institute's Fourth Annual Macroresults for Microarrays: An Array of Possibilities World Trade Center. Boston, MA, USA. **May 13-14, 2004.** *Colloquium:* Anthony Guiseppi-Elie "Fundamental Studies of A Cell-based Neurotoxicity Biosensor Using Neuron to Electrode Surface Attachment (NESA)" Graduate Research Engineering Seminar Series, VCU School of Engineering, Virginia Commonwealth University, Richmond, VA, USA. **April 19<sup>th</sup>, 2004.**
173. Sean Brahim, Chenghong Lei, Gary Wnek, Ray Baughman and Anthony Guiseppi-Elie, "Carbon Nanotube Modified Electrodes for the Bioelectrochemistry of Redox Enzymes" Nanofiber Symposium, Virginia Biotechnology Research Park, Richmond, VA, USA. **April, 16<sup>th</sup>, 2004.**
174. Anthony Guiseppi-Elie "Surface Properties of Gold: Sorption/Desorption and Activation/Deactivation" Intel Corporation, Santa Clara, CA, USA. **March 30, 2004.**
175. *Colloquium:* Anthony Guiseppi-Elie "Preclinical Investigation of the Mechanism of Action of Novel Platinum Compounds in Malignant Glioma using Microarray Gene Expression" Neuro-Onclogy Forum, Virginia Commonwealth University, Richmond, VA USA. **March 19, 2004.**
176. *Invited Paper:* Anthony Guiseppi-Elie "Feasibility Studies in Development of a Temporary Implantable Lactate Sensor Biochip for Monitoring During Hemorrhage."
177. *Colloquium:* Anthony Guiseppi-Elie "Modification of Gold Electrodes for Improved Neuron-to-Electrode Surface Attachment (NESA)" Laboratory for Physical Sciences, University of Maryland, College Park, Maryland, USA. **March 3, 2004.**
178. Sean Brahim, Ehard Bieberich and Anthony Guiseppi-Elie "Bio-smart Materials for Implantable Biosensors". World Congress on Medical Physics and Biomedical Engineering, Sydney Convention & Exhibition Centre, Sydney, Australia. **August 24 - 29, 2003.**Anthony Guiseppi-Elie, Sean Brahim, Sheena Abraham, Gymama Slaughter, Felix Miranda, Noulie Theofylaktos, Rainee Simons, Robert Diegelmann, Luciana Torres, R. Wayne Barbee and Kevin Ward "Feasibility Studies in Development of a Temporary Implantable Lactate Biochip Sensor for Monitoring During Hemorrhage". **June 15-18, 2003.**Sean Brahim and Anthony Guiseppi-Elie (2003) "Characterization of electroconductive ppy-p(HEMA) composite hydrogels for sensing applications". Proceedings of the Virginia Academy of Sciences, University of Virginia, Charlottesville, Virginia. **May 29, 2003.***Invited Speaker* Anthony Guiseppi-Elie "Bio-smart Materials: Co-joined Molecular Recognition and Signal Transduction in Biosensors and Biochips". VIIIth International Seminar on the Technology of Inherently Conductive Polymers Niagara-on-the-Lake, Ontario, Canada. **June 18 - 20, 2001.***Invited Speaker:* Anthony Guiseppi-Elie "Nano-Bio: Bioelectronics Using Carbon Nanotube and Colloidal Gold Nanoparticles", Center for Innovative Technology, Herndon, Virginia. **June 05, 2001.**Anthony Guiseppi-Elie *Invited Speaker.* Bioactive Electroconductive Hydrogel Polymers: Combining Molecular Recognition and Electrical Transduction" *4th International Symposium on Frontiers in Biomedical Polymers* Williamsburg, Virginia, USA. **May 16-19, 2001.**Anthony Guiseppi-Elie *Invited Speaker.* "Bio-smart Materials: Co-joined

- Molecular Recognition and Signal Transduction in Bioelectrochemistry, Biosensors and Biochips" RCMI (Research Center for Minority Institutions) 2001 Spring Symposium Clark Atlanta University. **April 26-27, 2001.** Rosalyn Hobson and Anthony Giuseppi-Elie "The Applicability of Temperature Correction to Chemoresistive Sensors in an e-NOSE-ANN System". Conference on Modeling and Simulation of Microsystems: MSM 2001 Conference. Hilton Head, South Carolina. **March 19-21, 2001.** Anthony Giuseppi-Elie *Invited Speaker*. "Bioelectronic Detection of DNA Hybridization: Toward Point of Concern DNA Diagnostics". Research and Development Co-operation for Genesensors and UFT, University of Bremen, Bremen, Germany. **March 15, 2001.** *Plenary Speaker:* Anthony Giuseppi-Elie. "Bio-smart Materials: Co-joined Molecular Recognition and Signal Transduction in Bioelectrochemistry, Biosensors and Biochips" IV International Congress on Chemistry (ICC) & The XIII Caribbean Conference on Chemistry and Chemical Engineering (CCCCEng) Palacio de Convenciones de La Habana, Havana, Cuba. **April 16-20, 2001.** *Invited Speaker:* Anthony Giuseppi-Elie. "Bioelectronic Detection of DNA Hybridization: Toward Point of Concern DNA Diagnostics". BioChips 2001 Polytechnic University, Brooklyn, NY, USA. **March 12-13, 2001.** *Invited Speaker:* Anthony Giuseppi-Elie "Inherently Conductive Polymer-Biopolymer Complexes for Biosensors and Controlled Release". Departments of Chemistry and Chemical Engineering University of the West Indies, St. Augustine, Republic of Trinidad and Tobago. **March 8, 2001.** *Invited Speaker:* Anthony Giuseppi-Elie "Bioelectronic Detection of DNA Hybridization: Toward Point of Concern DNA Diagnostics". Motorola Clinical MicroSensors, Pasadena, California, USA. **March 2, 2001.** *Invited Speaker:* Anthony Giuseppi-Elie "Inherently Conductive Polymer-Biopolymer Complexes for Biosensors and Controlled Release". Hughes Research Laboratories (HRL), Malibu, California. **March 1, 2001.**
192. *Invited Speaker:* Anthony Giuseppi-Elie "Inherently Conductive Polymer-Biopolymer Complexes for Biosensors and Controlled Release". Medtronic Heart and valve Division, Santa Ana, California, USA. **February 28, 2001.**
193. *Invited Speaker:* Anthony Giuseppi-Elie, Chenghong Lei and Ray H. Baughman "Direct Electron Transfer to Glucose Oxidase Using Carbon Nanotube Electrodes" The fifth workshop on multifunctional polymers and smart polymer systems: Technological Applications. The Intelligent Polymer Research Institute, University of Wollongong, Australia. **January 4-6, 2001.**
194. *Invited Speaker:* Anthony Giuseppi-Elie "GenoSensors Using Inherently Conductive Polymer-DNA Complexes". SEAM 2000, Polytechnic University, New York. **December 2, 2000.**
195. *Colloquium Speaker:* Anthony Giuseppi-Elie. "Bioactive Electroconductive Polymers: Combining Molecular Recognition and Electrical Transduction". Department of Chemical Engineering Seminar Series, Clemson University, South Carolina. **October 12, 2000.**
196. Anthony Giuseppi-Elie, Rosalyn Hobson, Rob Pearson and Richard M. Costanzo. "A VOC Responsive e-NOSE", Invensys Corporation, Richmond Virginia. **August 22, 2000.**
197. *Plenary Address:* Anthony Giuseppi-Elie "Biochips: Opportunities for Curriculum Enhancement at 2-yr and 4-yr Institutions" Sixth Annual Conference and Workshops on Advanced Technological Education in Semiconductor Manufacturing (ATESM 2000), Orlando, Florida. **August 3, 2000.**

198. *Invited Speaker:* Anthony Giuseppi-Elie "On-board Detection Strategies for Lab-on-Chip" Mallinckrodt Baker, New Jersey. **July 21, 2000.**
199. Anthony Giuseppi-Elie *Invited Paper.* "Bioactive Electroconductive Polymers: Combining Molecular Recognition and Electrical Transduction" *Symposium S: Electrically Active Polymers.* Proceedings of the Spring 2000 MRS Meeting, San Francisco, California. April 24 - 27, 2000.
200. David Colby, Shahab Siddiqui, Catherine Branch, Jesus Ortega, Tuan Hoang, Samuel Anin, Lisa Moroni<sup>+</sup>, Patrick Hebert<sup>+</sup>, D. Robley Wood, Oliver Bögler, Anthony Giuseppi-Elie, "A Gene Chip for Expression Profiling in Brain Tumors". 13th Annual Meeting: Mid-Atlantic Bio-Engineering Consortium, University of Delaware. **April 7, 2000.**
201. Kenneth Tuan Hoang, Chris T. Hang, Kerrianne Cullen and Anthony Giuseppi-Elie "Colloidal Gold Nanoparticles in DNA Diagnostics" (1<sup>st</sup> Place Paper). 13th Annual Meeting: Mid-Atlantic Bio-Engineering Consortium, University of Delaware. **April 7, 2000.**
202. Samuel K. Anin, Catherine Ellen, Gary E. Wnek and Anthony Giuseppi-Elie "Chemoresistive Response of Carbon Nanotube-Polymer Composites to VOCs". 13th Annual Meeting: Mid-Atlantic Bio-Engineering Consortium, University of Delaware. **April 7 2000.**
203. Anthony Giuseppi-Elie *Invited Paper.* "Bioactive Electroconductive Polymers: Combining Molecular Recognition and Electrical Transduction Spring MRS Meeting, San Francisco, California" *Symposium on Electrified Polymer/Solution Interfaces* 219th ACS National Meeting, San Francisco, California Colloid and Surface Science Division. **March 26-30, 2000.**
204. Anthony Giuseppi-Elie *Invited Address.* "Silicon's Intersection with Biology: Bioelectronics, Biosensors and Biochips" Department of Pharmaceutics, Virginia Commonwealth University. March 14th, 2000.
205. *Invited Speaker:* Anthony Giuseppi-Elie "Silicon's Intersection with Biology: Bioelectronics, Biosensors and Biochips" University of Virginia Microelectronics Institute, University of Virginia. **March 3, 2000.**
206. David Colby, Catherine Branch, Shahab Siddiqui, Tuan Hoang, Samuel Anin, Jesus Ortaga, Lisa Mironi, Patrick Hebert, Anthony Giuseppi-Elie and Oliver Bögler A Centralized Biochip Facility at VCU/MCV. Engineering the Future of Medicine Seminar Series, Virginia Commonwealth University, Richmond, Virginia. **March 2, 2000.**
207. *Invited Speaker:* Anthony Giuseppi-Elie and Oliver Bögler "Biochips:Background" *Symposium on Merging Microtechnologies: The Biochip and the Microchip* J. Sargeant Reynolds Community College, Richmond, Virginia. **January 21, 2000.**
208. *Colloquium Speaker:* Anthony Giuseppi-Elie "Two-dimensional Nanocomposites of Polyethylene and Polyaniline at Au (111)" Department of Physics, College of Humanities and Science, Virginia Commonwealth University, Richmond, Virginia, USA. **October 1, 1999.**
209. *Invited Speaker:* Anthony Giuseppi-Elie (*Invited Paper*) "Biotechnical Applications of Electroconductive Polymers: Biosensors and Biochips" 6<sup>th</sup> International Seminar on the Technology of Inherently Conductive Polymers, Ontario, Canada. **September 26-29, 1999.**

210. *Invited Speaker:* Anthony Guiseppi-Elie. "Conductive Polymer Biosensors" Department of Chemistry and Chemical Engineering, Polytechnic University, Brooklyn, New York. USA. **June 16, 1999.**
211. *Invited Speaker:* Anthony Guiseppi-Elie "Biotechnical Applications of Electroconductive Polymers" Gordon Research Conference on "Organic Thin Films". Salve Regina University, Newport, Rhode Island, USA. **June 15, 1999.**
212. *Invited Speaker:* Anthony Guiseppi-Elie "Biotechnical Applications of Electroconductive Polymers" Xerox Research Center of Canada (XRCC), Mississauga, Ontario, Canada. **June 4, 1999.**
213. *Invited Speaker:* Anthony Guiseppi-Elie "Bioelectronics Biosensors and Biochips: A Collaborative Research Center of Excellence at VCU". Department of Chemistry and Chemical Engineering, Polytechnic University, Brooklyn, NY. **June 2, 1999.**
214. *Invited Speaker:* Anthony Guiseppi-Elie "Bioelectronics Biosensors and Biochips: A Collaborative Research Center of Excellence at VCU". Massey Cancer Center, Medical College of Virginia Campus, Virginia Commonwealth University, Richmond Virginia, USA. **April 7<sup>th</sup>, 1999.**
215. *Invited Speaker:* Ann M. Wilson, Emmanuel Iwuoha, Dyer Narinesingh, Anthony Guiseppi-Elie "Divalent Cation Electrorelease from Electroconductive Hydrogels" XII Conference on Chemistry and Chemical Engineering; University of the West Indies, St. Augustine: Republic of Trinidad and Tobago. **March 28-April 1, 1999.**
216. Anthony Guiseppi-Elie (*Invited Speaker*) "Biotechnical Applications of Electroconductive Polymers: Biosensors, Biochips and Controlled Release Devices" 5<sup>th</sup> International Seminar on the Technology of Inherently Conductive Polymers, Clearwater Beach, Florida: March 1-4<sup>th</sup>, 1999.
217. Anthony Guiseppi-Elie (*Invited Speaker*) "A Collaborative Research Center of Excellence: Bioelectronics Biosensors and Biochips". Richmond Technology Council, Richmond, Virginia, USA. February 9th, 1999
218. Anthony Guiseppi-Elie (*Invited Speaker*) "NOSE: Natural Olfactory Sensor Emulator", Department of Physiology, Medical College of Virginia Campus, Virginia Commonwealth University, Richmond Virginia, USA. February 4<sup>th</sup>, 1999.
219. Anthony Guiseppi-Elie(*Invited Paper*) "Biotechnical Applications of Electroconductive Polymers: Electronic Noses, Biosensors, and Controlled Electrorelease Devices", International Symposium on Instrumentation in Agriculture, II SIERGO, EMBRAPA, Sao Carlos, Brazil. November 30th – December 4<sup>th</sup>, 1998.
220. Anthony Guiseppi-Elie (*Invited Speaker*) "Bioelectronics Biosensors and Biochips: The Good the Bad and the Absolutely Delightful", Chemical Sciences and Technology Division (CST) Colloquium Series, Los Alamos National Laboratory, Los Alamos, NM. November 18<sup>th</sup>, 1998.
221. Anthony Guiseppi-Elie (*Invited Speaker*) "Bioelectronics Biosensors and Biochips: The Good the Bad and the Absolutely Delightful", Biomedical Engineering Seminar, Biomedical Engineering Program, School of Engineering, Virginia Commonwealth University, Richmond, Virginia. November 10, 1998

222. Anthony Giuseppi-Elie (*Invited Speaker*) "Bioelectronics Biosensors and Biochips: A Collaborative Research Center of Excellence at VCU", Symposium on New Initiatives in the State of Virginia, Annual Convention and Exhibition of the Virginia Biotechnology Association, Richmond, VA. October 21, 1998.
223. Anthony Giuseppi-Elie, Gary E. Wnek, Philippe Lam, Gary C. Tepper, Oliver Bogler, Gary L. Bowlin, John Alexander and Robert J. Mattauch "Probing Biochemical and Biological Phenomena Using Electrical Impedance Techniques: Applications to Biochips" IBC's International Conference on Biochips. San Francisco, California. August 1998.
224. Anthony Giuseppi-Elie (*Invited Speaker*) "NOSE: Natural Olfactory Sensor Emulator", Department of Chemical Engineering, Virginia Tech and State University.
225. Anthony Giuseppi-Elie "Impedimetric Biosensors Using Smart Gels: Disposable Biosensors", Workshop on Bioelectronics, Biosensors and Biochips, Virginia Commonwealth University, Richmond, VA. October 20, 1998.
226. Anthony Giuseppi-Elie "Introduction and Connection Among Bioelectronics, Biosensors and Biochips", Workshop on Bioelectronics, Biosensors and Biochips, Virginia Commonwealth University, Richmond, VA. October 20, 1998.
227. Sheldon P. Wesson, Ann M. Wilson and Anthony Giuseppi-Elie "Impedance Spectroscopy and Inverse Phase Gas Chromatography for Evaluating Probe/Polymer Interactions in Cured Latex Coatings" Proc. Second International Symp. on Acid-Base Interactions: Relevance to Adhesion Newark, NJ, USA. **October 19-21, 1998**.
228. Anthony Giuseppi-Elie "Bioelectronics Biosensors and Biochips: The Good the Bad and the Absolutely Delightful", Third National Biomedical Engineering Careers Symposium, Johns Hopkins University. **August 10, 1998**.
229. Anthony Giuseppi-Elie "Bioelectronics Biosensors and Biochips: The Good the Bad and the Absolutely Delightful", Symposium on Technology in Medicine, University of Virginia, VA, USA. **June 10, 1998**.
230. Anthony Giuseppi-Elie "Combined Recognition-transduction in Electroconductive Polymer Biosensors" IBC's International Conference on Biosensor Technologies. The Tremont, Boston, Massachusetts. **May 14-15, 1998**.
231. Anthony Giuseppi-Elie "Biotechnical Applications of Electroconductive Polymers: Biosensors, Electronic Noses and Controlled Electorelease Devices" 25th Annual NOBCChE Conference, Rohm and Haas Macromolecular Symposium '98. Dallas, Texas, USA. April 13 - 16, 1998.
232. Anthony Giuseppi-Elie "Biotechnical Applications of Electroconductive Polymers" International Seminar on the Technology of Inherently Conductive Polymers, San Diego, CA, USA. March 3-5th, 1998.
233. Anthony Giuseppi-Elie "Biotechnical Applications of Electroconductive Polymers" International Seminar on the Technology of Inherently Conductive Polymers, San Diego, CA, USA. **March 3-5, 1998**.
234. Anthony Giuseppi-Elie, Andrew R. Sujdak and Ann M. Wilson, "Electroconductive Hydrogels: Electrical, Electrochemical and Electrochemical Impedance Properties". *Symposium J* Electrical, Optical, and Magnetic Properties of Organic Solid-State Materials IV,

Molecular Engineering Section, Fall National Meeting, Materials Research Society, Boston, MA, USA. **December 1-5, 1997.**

235. Anthony Guiseppi-Elie, Ann M. Wilson, Andrew R. Sujdak and Kimberly E. Brown, "Electroconductive Hydrogels: Novel Materials for the Controlled Electrorelease of Bioactive Peptides" Proceedings of the 214<sup>th</sup> National ACS Meeting, Polymer Chemistry Division, Las Vegas, Nevada, USA. **September 7-11, 1997.**
236. Anthony Guiseppi-Elie\* and Ann M. Wilson "Sensory Devices Based on Conductive Polymers: Chemical, Biological and Gas Sensors" International Seminar on the Technology of Inherently Conductive Polymers, San Diego, CA, USA. **March 3-5, 1997.**
237. K. Seshadri, S. V. Atre, D. L. Allara, Y.-T. Tao and A. Guiseppi-Elie "Nanoclusters of Polymethylene at Au(111) Surfaces" ACS Graduate Polymer Research Conference, Blacksburg, VA, USA. **June 1996.**
238. Anthony Guiseppi-Elie\* and Ann M. Wilson, "Chemical and Biological Sensor Devices Based on Electroconductive Polymers" International Seminar on the Technology of Inherently Conductive Polymers, Deerfield, Florida, USA. **February 26-28, 1996.**
239. Norman F. Sheppard, Jr., David J. Mears and Anthony Guiseppi-Elie "Model of a Conductimetric Urea Biosensor" Pacifichem '95, Honolulu, HI, USA. **December 11-16, 1995.**
240. Anthony Guiseppi-Elie and Norman F. Sheppard, Jr. (Invited Lecture) Conductimetric Biosensors Formed From Electroconductive Polymer-based Devices. The First Asia-Pacific Symposium on Biosensors; University of Wollongong, NSW, Australia: **December 4th-6th, 1995.**
241. Anthony Guiseppi-Elie, James M. Tour, David L. Allara and Norman F. Sheppard, Jr. "Bioactive Polypyrrole Thin Films with Conductimetric Response to Analyte" Symposium on Electrical, Optical, and Magnetic Properties of Organic Solid State Materials: Proceedings of the Fall 1995 MRS Meeting, Boston, Massachusetts. **November 27-December 1, 1995.**
242. Norman F. Sheppard, Jr., David J. Mears and Anthony Guiseppi-Elie "Model of an Immobilized Enzyme Conductimetric Urea Biosensor" 1995 Annual Fall Meeting of the Biomedical Engineering Society:, USA. **November, 1995.**
243. Anthony Guiseppi-Elie and Norman F. Sheppard, Jr. (Invited Lecture) "Conferring Biospecificity to Electroconductive Polymer-based Biosensor Devices" in symposium on Polymers of Biological Significance; ACS NERM University of Rochester, Rochester, NY, USA. **October 22-25, 1995.**
244. Anthony Guiseppi-Elie\* and Ann M. Wilson, "Electroconductive Polymer Thin Films with Internal Bioactive Moieties for Biosensor Applications" in symposium on "Polymeric and Organic Materials: Solid State Properties and Smart Materials", 209th National Meeting of the ACS, PMSE Division: Anaheim, CA, USA. **April 2-7, 1995.**
245. Anthony Guiseppi-Elie (Plenary Lecture) "Biosensors: Bioanalytical Devices at the Interface Between Biotechnology and Microelectronics." The XIth Conference of Chemistry and Chemical Engineering; University of the West Indies, St. Augustine: Republic of Trinidad and Tobago. **March 6 -10, 1995.**
246. Anthony Guiseppi-Elie and Ann M. Wilson, "Novel Analytical Method for Conductimetric Chemical and Biosensors Formed from Electroconductive Polymers" in

symposium on "Transducer-active Polymers", 208th National Meeting of the ACS, PMSE Division. **August 21-26, 1994.**

247. Anthony Guiseppi-Elie, Ann M. Wilson, Charles L. Linden<sup>□</sup>, Fred J. Pearce<sup>□</sup>, William P. Wiesmann<sup>□</sup>, David L. Glick "A Conductimetric H<sub>2</sub>O<sub>2</sub> Sensitive Electroconductive Polymer Transducer for Development of Oxidoreductase Enzyme Biosensors and Oxidoreductase Labeled Immunosensors" in symposium on "Transducer-active Polymers", 208th National Meeting of the ACS, PMSE Division. **August 21-26, 1994.**
248. Anthony Guiseppi-Elie; "Impedance Sensing" Chemical and Biological Sensors Symposium, University of Pittsburgh, Pittsburgh, Pennsylvania. **June 9-11, 1993.**
249. Anthony Guiseppi-Elie "Conductimetric Biosensors Developed Using the Electroactive Polymer Sensor Interrogation System - EPSIS" 1993 International Electroanalytical Symposium, Indianapolis, Indiana. **May 19-23, 1993.**
250. Anthony Guiseppi-Elie "Chemoresistive Chemical and Biosensor Devices Based on Electroactive Polymer Sensor Technology" Pittsburgh Conference, New Orleans, Louisiana. **March 9-12, 1992.**
251. Anthony Guiseppi-Elie "Biosensor Devices Formed From Transducer-Active Polymeric Thin Films"; AIChE Annual Meeting, Chicago, Illinois. **November 11-16 1990.**
252. Anthony Guiseppi-Elie and Ann M. Wilson "Microsensor Devices Formed From Transducer-Active Polymeric Thin Films"; Symposium on Monolayers and Thin Polymeric Films in Electronics, 64th Colloid and Surface Science Symposium, Lehigh University, Bethlehem, PA . **June 18-20, 1990.**
253. Anthony Guiseppi-Elie "Introduction of Polar Functionalities to the Near Surface of Built-up, Y-Type, L-B Films". The Second Annual Symposium of the North Carolina Section of the American Chemical Society; "Chemistry at Surfaces and Interfaces", Duke University, North Carolina. **September 9-10, 1988.**
254. Anthony Guiseppi-Elie "Biosensor Applications of Polyacetylene". The 15th Annual National Conference of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), Philadelphia, Pennsylvania. **April 4-8, 1988.**
255. Greg S. Galletti and Anthony Guiseppi-Elie "Vinyl Stearate Monolayers for L-B Film Applications", Second International Conference on Langmuir-Blodgett Films, Schenectady, New York. **July 1-4, 1985.**
256. Anthony Guiseppi-Elie, "Underfilm Corrosion of Coated Mild Steel". The 10th Caribbean Conference of Chemistry and Chemical Engineering, University of the West Indies, St. Augustine, Trinidad. **January 3-7, 1983.**
257. Anthony Guiseppi-Elie, A. and Gay E. Wnek, "Environmental Stability of Doped (CH)<sub>x</sub> Electrodes in Aqueous Solutions". The IUPAC 28th Macromolecular Symposium, University of Massachusetts, Amherst, Massachusetts. **July 12-16, 1982.**

#### **NATIONAL AND INTERNATIONAL WORKSHOPS**

1. *Keynote Lecture and Instructor: Theory and Practice of Point of Care Tests: From Development through Manufacturing.* San Diego Marriott Del Mar Hotel, San Diego, CA, USA. March 31 - April 2, 2009.
2. *Keynote Lecture and Instructor: The Emerging Technologies to Enable Quantitative Rapid Tests.* Hyatt Islandia Hotel, San Diego, California, USA. September 24-26, 2007.
3. *Keynote Lecture and Instructor: The X11th International Seminar on the Technology of Inherently Conductive Polymers:* "Clinical Diagnostics Using Bio-Smart Thin Film Biosensors". LA PIETRA International Conference Center, Via Bolognese, 120 50139 Florence, ITALY. October 9-11, 2006.
4. *Keynote Lecture and Instructor: Practical Approaches to Microarrays for Diagnostics* Arlington, Virginia, USA. September 19-21, 2006
5. *Keynote Lecture and Instructor: The 1st Asia Biosensors and Biochip "Hands on" Workshop.* Organized by GENE Co., Ltd. and Gene Tech (Shanghai) Co., Ltd. Beijing and Shanghai, Peoples Republic of China. April 6-16, 2006.

#### **INVITED PUBLIC PRESENTATIONS:**

**"Implantable Biochips: Research at the Center for Bioelectronics, Biosensors and Biochips at Clemson University."** Rotary Club of Anderson, Anderson Civic Center, Anderson South Carolina. April 15<sup>th</sup>, 2008.

**"Implantable Biochips: Research at the Center for Bioelectronics. Biosensors and Biochips at Clemson University."** Anderson Economic Development Authority, Anderson, South Carolina. March 6<sup>th</sup>, 2008.

**"Implantable Biochips: Research at the Center for Bioelectronics, Biosensors and Biochips at Clemson University."** East Greenville Rotary, Greenville East, South Carolina. January 14<sup>th</sup>, 2008

**"Implantable Biochips: Research at the Center for Bioelectronics, Biosensors and Biochips at Clemson University."** Simpsonville Rotary, Simpsonville, South Carolina. October 17<sup>th</sup>, 2007.

**"NanoBio: What's all the Fuss about Small Stuff"** Honors Program, Virginia Commonwealth University, Richmond, Virginia. Friday 8<sup>th</sup>, April 2005.

*Keynote Address: "NanoBio: What's all the Fuss about Small Stuff"* 2005 Annual General Meeting of the Virginia Space Grant Consortium (VSGC), Omni Hotel, Norfolk, Virginia. Friday 1st, April 2005.

*Keynote Address: "Engineering in an Era of Nano and Bio"* 2005 Annual General Meeting of the Richmond Joint Engineers Council (RJEC), Jefferson Hotel, Richmond, Virginia. Thursday 24<sup>th</sup>, February 2005.

**"NanoBio: What's all the Fuss about Small Stuff"** Lunch Break Science Series, Science Museum of Virginia (SMVA), Richmond, Virginia. Friday 1st, April 2004.

**"On-going Research in Bioelectronics, Biosensors and Biochips"** Biotechnology Program, Godwin High School, Richmond, Virginia. Wednesday 17th, November 1999.

**"A VCU Center for Bioelectronics, Biosensors and Biochips"** Board of Advisors and Faculty, VCU Chemical Engineering Department, Virginia Commonwealth University, Richmond, Virginia. Friday 12th, November 1999.

**"A VCU Center for Bioelectronics, Biosensors and Biochips"** VCU Ad Center, Virginia Commonwealth University, Richmond Virginia. October 13<sup>th</sup>, 1999.

**"Biotechnology: More Biochips Please"** Jewish Women's Club of Richmond, Jewish Community Center, Thalhimer Adult Lounge, 5403 Monument Avenue, Richmond Virginia, USA 23284. October 12<sup>th</sup>, 1999.

**"From the Bench to the Biochip: Innovations from VCU".** The Charlottesville Venture Group, Charlottesville, Virginia, USA. June 12th, 1999.

**"Bioelectronics, Biosensors and Biochips: A Collaborative Research Center of Excellence at VCU".** Greater Richmond Technology Council, The Richmond Marriott, Richmond, Virginia, USA. February 9<sup>th</sup>, 1999.

**"The Future of Biomedical Engineering"** Alpha Eta Mu Beta Biomedical Engineering Scientific Honor Society, Johns Hopkins University School of Medicine, Baltimore, Maryland. Nov. 5th, 1997.

**"Bioactive Electroconductive Polymers: Multifunctional Materials for Biotransducers"** Monsanto Growth Enterprises, St. Louis, Missouri. May 23, 1996.

**"Surviving in Turbulent Financial Markets and Climates"** University City Science Center, Philadelphia, Pennsylvania. November 15, 1994.

**"Environmental Diagnostics Using Biosensors"** Wistar Symposium Series, Wistar Institute, Philadelphia, PA. May 11, 1994.

**"Opportunities in Chemistry -- Biotechnology"** Rensselaer Polytechnic Institute (RPI), Department of Chemistry, Troy, NY. April 8, 1994.

**"On-site Monitoring of Environmental Pollutants Using Biosensors"** Pennsylvania Biotechnology Association Annual Symposium, Pennsylvania Convention Center, Philadelphia, PA. April 26 -27, 1993.

**"Careers in Biotechnology: The Picture and the Promise"** Clarion University. Annual Symposium, Pennsylvania Science Teachers Association, Allentown, PA. November 4-5, 1993.

**"High Technology Entrepreneurship: A Panel Discussion"** Moderator, School of Business, Rider University, Lawrenceville, NJ. November 18, 1993.

**"Corporate Partnership Management: How to Get Started"** Annual Symposium, Northeastern Pennsylvania Technology Council, Wilkes Barre, PA. October 21, 1993.

**"Restructuring School Practices for Student Learning Outcomes: A Summit With Education Leaders. "Implications for Practice: Emerging Issues"** Temple University Center for Research in Human Development and Education. April 23-24, 1993.

**"A Conductimetric Glucose Biosensor for *in vivo* Monitoring of Blood Glucose Levels"** Division of Surgery, Walter Reed Army Institute of Research, Washington, DC 20307. July 27, 1993.

**"Conductimetric Chemical and Biosensors Devices Based on Electroactive Polymer Sensor Technology"** Center for Bio/Molecular Science and Engineering, Naval Research Laboratory, Washington DC 20375. December 6, 1991.

**"Biosensor Applications of Polyacetylene"** Department of Materials Science and Laboratory for Research on the Structure of Matter, University of Pennsylvania, Philadelphia, Pennsylvania. December 14, 1987.

**"Langmuir Blodgett Films: Obituaries and Opportunities"** Department of Chemistry, College of Staten Island/City University of New York (CSI/CUNY), New York. November 19, 1987.

**"Sensor Applications of Electroactive Polymers"** MIT Summer Session Program, Cambridge, Massachusetts. July 22, 1987.

**"Preparation and Applications of Langmuir-Blodgett Films"** Research Division, W. R. Grace and Co., Columbia, Maryland. August 22, 1984.

**"Fuel Cell Applications of Polyacetylene"** Sandia National Labs., Albuquerque, New Mexico. August 19, 1983.

**"Environmental Stability of Conducting Polyacetylene"** Owens Corning Technical Center, Granville, Ohio. March 03, 1983.

## HYDROGELS AND DRUG DELIVERY

127. A. Nolan Wilson and **Anthony Giuseppi-Elie** "Targeting Homeostasis in Drug Delivery Using Bioresponsive Hydrogel Microforms" (**2013**) *Journal of Controlled Release* (**2013**) (**Submitted for Publication**). (IF 6.49)
128. Christian N. Kotanen, A. Nolan Wilson, Chenbo Dong, Cerasela Zoica Dinu, Gusphyl A. Justin and Anthony Giuseppi-Elie "The Effect of the Physicochemical Properties of Bioactive Electroconductive Hydrogels on the Growth and Proliferation of Attachment Dependent Cells" *Biomaterials* (**Accepted**) (IF 7.404)
129. A. Nolan Wilson and **Anthony Giuseppi-Elie** "Bioresponsive Hydrogels" *Advanced Healthcare Materials* (**2013**) 2(4) 520-532. [doi:10.1002/adhm.201200332](https://doi.org/10.1002/adhm.201200332)
130. **Anthony Giuseppi-Elie**, Chenbo Dong and Cerasela Zoica Dinu "Crosslink Density of a Biomimetic Poly(HEMA)-based Hydrogel Influences Growth and Proliferation of Attachment Dependent RMS 13 Cells" *Journal of Materials Chemistry: Themed Issue on Materials for Biosurfaces (invited)* *J. Mater. Chem.* (**2012**) 22 (37), 19529 – 19539 [doi: 10.1039/C2JM32516K](https://doi.org/10.1039/C2JM32516K) (IF 5.10)
131. A. Nolan Wilson, Ruth Salas and **Anthony Giuseppi-Elie** "Bioactive Hydrogels Demonstrate Mediated Release of a Chromophore by Chymotrypsin" *Journal of Controlled Release* (**2012**) 150(1) 41-47. [doi: 10.1016/j.jconrel.2012.02.026](https://doi.org/10.1016/j.jconrel.2012.02.026) (IF 6.49)
132. Christian N. Kotanen, A. Nolan Wilson, Ann M. Wilson, Kazuhiko Ishihara and **Anthony Giuseppi-Elie** "Biomimetic Hydrogels Gate Transport of Calcium Ions Across Cell

- Culture Inserts" *Biomedical Microdevices* (**2012**) 14(3) 549-558. [doi:10.1007/s10544-012-9632-0](https://doi.org/10.1007/s10544-012-9632-0) (IF 3.39)
133. **Anthony Guiseppi-Elie** "Electroconductive Hydrogels: Synthesis, Characterization and Biomedical Applications" *Biomaterials*, (**2010**) 31(10) 2701-2716.  
[doi:10.1016/j.biomaterials.2009.12.052](https://doi.org/10.1016/j.biomaterials.2009.12.052) (IF: 3.8)
134. Ali Ozgur Boztas and **Anthony Guiseppi-Elie\*** "Immobilization and Release of the Redox Mediator Ferrocene Monocarboxylic Acid from within Cross-linked p(HEMA-co-PEGMA-co-HMMA) Hydrogels" *Biomacromolecules* (**2009**) 10(8):2135-2143.  
[doi:10.1021/bm900299b](https://doi.org/10.1021/bm900299b) (IF=4.15)
135. Sean Brahim, Dyer Narinesingh and **Anthony Guiseppi-Elie** "Release Characteristics of Novel pH-Sensitive p(HEMA-DMAEMA) Hydrogels Containing 3-(trimethoxysilyl) propyl methacrylate". *Biomacromolecules* (**2003**) 4, 1224-1231. [doi: 10.1021/bm034048r](https://doi.org/10.1021/bm034048r) (IF=3.66)
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