Faculty Research and Activities

RESEARCH GRANTS

University Research Grants (URB)
for the period January - December 2013

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Principal Investigator</th>
<th>Amount</th>
</tr>
</thead>
</table>
| Upgrade of Anaerobic Digestion Biogas into Higher Alkanes for Use as Liquid Fuel | PI: J. Zeaiter  
Co-PI: D. Salam  
M. Ahmad | 24,000 USD |
| Occurrence of Pharmaceuticals and Hormones in Effluent Discharges and Rivers in Lebanon | PI: Mahmoud Al-Hindi  
Co-PI: D. Salam, W. Saad, L. Semerjian | 21,300 USD |
| “Effect of Energy Input on the Similarities of O2 and CO2 Transfer Rates      | PI: F. Azizi  
Co-PI: M. Al-Hindi | 8,700 USD |
| Arsenic Removal from Water Using Waste Biomass such as Olive Stones and Dates Pits | PI: M. Ahmad  
Co-PI: M. Al-Hindi | 6,800 USD |
| The Design and Efficacy Evaluation of Acoustic Sensitive Polymer-Shelled Microbubbles for the Controlled And Targeted Delivery of the Drug Sulprostone | PI: W. Saad | 8,100 USD |

External Research Grants
for the period January - December 2013

<table>
<thead>
<tr>
<th>Project Title</th>
<th>PI</th>
<th>Funding Agency</th>
<th>Amount</th>
<th>Duration</th>
</tr>
</thead>
</table>
| Production of Biofuels from Agricultural Wastes                              | PI: F. Abulrub  
Co-PI: M. Ahmad | Jordan University of Science and Technology (JUST) | $312,095 | October 2013-September 2016 |
| On-Shore Windfarm Construction in Lebanon                                     | PI: H. Khoury  
Co-PI: J. Zeaiter | Munib and Angela Masri | $20,000 | October 2013 – September 2015 |
**Faculty Development**

*Short-Term Faculty Development Grants*

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Conference</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walid Saad</td>
<td>Research Collaborative in Paris</td>
<td>January 18 – 27, 2013</td>
</tr>
</tbody>
</table>

*Junior Faculty Leave*

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Research Institution</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahmoud Al-Hindi</td>
<td>American University of Beirut</td>
<td>January 28 to June 2, 2013</td>
</tr>
<tr>
<td>Joseph Zeaiter</td>
<td>University of Belfast, UK</td>
<td>August 19 to October 18, 2013</td>
</tr>
</tbody>
</table>
Publications

Journal Papers


Conference Papers


Y. Salameh, M. Ahmad; “Arsenic Removal from Wastewater Using Dolomite,” Middle East Process Engineering Conference (MEPEC), Bahrain, 29 September - 2 October 2013.


H. Al Ashkar, S. Karaki, M. Al-Hindi, K. Abou Ghali; “Modelling and simulation of solar thermal electric energy and water production systems”. 11th Annual International Energy Conversion Engineering Conference (IECEC) that will be held from July 14 to July 17, 2013 in San Jose, CA, American Institute of Aeronautics and Astronautics (AIAA).

M. Harajli, F. Azizi, and G. Saad; “Stochastic Optimization of the Water Flooding Process through Front Tracking,” Accepted for presentation at the 5th International Conference on Computational Methods for Coupled Problems in Science and Engineering - COUPLED PROBLEMS 2013, Ibiza, Spain, June, 2013.


Book Chapter:
