New Application

<table>
<tr><td>Project Number</td><td>05/2013</td></tr>
<tr><td>Project Title</td><td>To produce a demonstration unit to convert bamboo/wood waste to activated carbon</td></tr>
<tr><td>Principal Investigator (PI)</td><td>Professor David Chi Wai HUI, Department of Chemical and Biomolecular Engineering, The Hong Kong University of Science and Technology</td></tr>
<tr><td>Project summary</td><td>The project aim is to design, construct and operate a small pilot demonstration unit that will convert bamboo scaffolding waste and wood pallet waste into valuable activated carbon using steam and/or other activation chemicals.</td></tr>
<tr><td>Research Theme</td><td>Waste recycling</td></tr>
<tr><td>Project Duration</td><td>12 months</td></tr>
<tr><td>Proposed Budget</td><td>The total budget is $1,921,000.00, comprising the following items:
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<tr><th>Item</th><th>Amount Requested ($)</th></tr>
<tr><td>Manpower
- Research Assistant I
@ $17,000 per month × 12 months
- Research Assistant II
@ $14,000 per month × 12 months
– Senior Research Assistant
@ $19,000 per month × 12 months</td><td>204,000
168,000
228,000</td></tr>
<tr><td>Equipment for demonstration Unit
- including fuel tanks, fuel pump, activation reactor, steam generator (SG), water pump for SG, oil burner, bamboo storage bins, feed preparation, product gas storage tank, product gas compressor, product gas burner, inert gas storage tank, inert gas compressor/ fan, flue gas alkali scrubber, alkali storage tank, waste alkali storage tank, alkali make-up tank, flue gas stack, flue has fan, wastewater treatment tank, acid storage tank, pH meter, acid pump, active carbon storage tanks, active carbon column test unit, weighing scales, flue gas analysis, flue gas analysis, flue gas sampling device, small briquetting or extrusion machine</td><td>1,150,000</td></tr>
<tr><td>Conference</td><td>15,000</td></tr>
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	(Cont'd) **Item** — **Amount Requested ($)** Consumables - including bamboo scaffolding waste, wood pallets, alkali, acid, diesel oil for reactor, four dyestuffs, metal frame and structure for mobile rig, and transport expense — 156,000 **Total** — **1,921,000**
Assessments/Remarks	See Appendix. Members are invited to advise whether the application should be supported and if supported, the exact amount of fund to be granted.

Secretariat, ECF Research Projects Vetting Subcommittee
February 2014