AFRICA CENTRES OF EXCELLENCE (ACE)

PAMI-AUST WORK PLAN (JANUARY - DECEMBER 2017)

Activity No	COMPONENT	SUB-COMPONENT	ACTIVITIES	OBJECTIVE	JUSTIFICATION	OUTPUT	ESTIMATED BUDGET ($)	RESPONSIBLE UNIT	Year 2016 January - December 2016															
									January	February	March	April	May	June	July	August	September	October	November	December				
1	**Coordination of research proposals from all partners**		Review and funding of research proposals from partners	To equip partner institutions with resources	This will enable some partners institutions to be able to host PAMI scholars and also equip others to be able to deliver higher-quality training and research to their students	* Increased research output (discoveries, patents, papers) *Higher-quality papers (Good to Great)	**$690,000.00**	*PAMI Secretariat *PAMI partners																
2	**Achieving Learning Excellence**	**Achieving Learning Excellence**	* Organization of short Training Programmes: Workshops (2 per year)	* To have two workshops per year	In order to achieve two of the goals of this project (Education and Research), it is important that participants be trained properly, present results of their work, and interact with experts in the	* Increased capacity to process minerals and raw materials within the region * Increased capacity for specialized skills (e.g., welding, electronic structure	**$210,000.00**	* PAMI partners (The one in January is carry-over from last year)																
			* Organization of short Training Programmes: Speciallized short courses (with 20-40 participants) 4 per year	* To have four specialized short courses per year			**$96,000.00**	* PAMI partners																
			* Teaching and training of of MSc and PhD students: Funding of scholarships	* To train Msc and PhD students	* This is important in order to achieve two specific goals (Education and Research) of the project	* Increased number of PhD and Msc graduates *Expanded research and learning opportunities across national and regional partner institutions using interdisciplinary and transdisciplinary approaches	**$375,000.00**	* PAMI partners * AUST academics																
3	**Achieving Research and Learning Excellence**	**Achieving Research and Learning Excellence**	* Award of International Travel Fellowships	* To send 10 students and 10 faculty from Africa to our international partners in USA, Brazil, Europe for collaborative research and training. Also, travel for	* In order to attain and maintain Research excellence in Africa, we need to strengthen Africa's capacity in world class research by bringing Africans in close proximity and to work with others who have more advanced research capacities	* Increased publication of peer-reviewed international journal papers and proceedings; *Increased industrial research and collaborations *Collaboration with IIT (India)	**$200,000.00**	* PAMI Executive Committee (PEC)																

4			Organization of outreach to Industry; organization of industry outreach day	* Interfacing with industrial partners for learning *Solving industrial problems through research	In Africa, carrying out research that is relevant to industry is important. This activity will help us in having close collaboration with industry, learn which research problems are important to industry and tackle these	Strengthened capacity to engage in world class research relevant to industry	**$100,000.00**	* PAMI Secretariat																					
5	**Action Plan Regarding Equity Dimensions**		Organization of outreach to schools and girls	* To have at least two major outreaches or outreach days to girls, secondary students, and their teachers	* This is important in order to sensitize students and especially girls to Materials Science and Engineering and to STEM in general	* Increased number of secondary school students (especially girls) opting for STEM courses	**$75,000.00**	* PAMI partners (The one in January is carry-over from last year 2016)																					
6	**Action Plan for Research Excellence**		Research by the focused research groups	* Procurement of Hyperthermia equipment	* Necessary for animal studies in the research of the Biomaterials Focused Research	* Discoveries in drug uptake * Possible patents * Research	**$100,000.00**	* Procurement Office																					
				* Procurement of Hall Voltage Measurement	* Necessary for determination of majority and minority carriers in semiconductor solar cells	* Characterization of new solar cells * Understanding of mechanism of action of particular solar cells	**$50,000.00**	* Procurement Office																					
				* Procurement of equipment for PL measurement	* Necessary for determination of concentration of carriers in solar cells	* Providing an understanding of the workings of the solar cell	**$40,000.00**	* Procurement Office																					
				* Battery deposition and characterizatio n equipment	* Needed for battery research	* New battery prototypes	**$75,000.00**	* Procurement Office																					
				* Current-voltage characterizatio n equipment	* Needed to determine the J-V curves for solar cells and OLEDS	* Quantification of performance of solar cells	**$10,000.00**	* Procurement Office																					
				Other small equipment/item s/consumables/ software	* Needed for support of research activities	* Enhanced research	**$15,000.00**	* Procurement Office																					
				Conference Travels, Journals, Equipment Use Fees	* This is important in order to gain new ideas, see what others are doing, gain advice and network/collabora tion opportunities * Increased capacity to do research	* Conference talks * Journal publications * Subscription to Journals * Increased research output	**$110,000.00**	* PAMI Secretariat																					

7	**Seed Grants**		Award of seed grants	* To fund innovative Academic--Industry ideas of PAMI scholars, researchers, students	* To help PAMI scholars with good ideas take these ideas from the laboratory to the "real world"	* Products in the real world derived from research outputs	**$100,000.00**	* PAMI Executive Committee (PEC)																							
8	**Meetings with Partners**	**Meeting with national partners**	Organization of meeting with national partners	* Education, Research, and Outreach Planning Meeting	* To help plan and give any needed modifications to PAMI activities	* Better coordination of PAMI activities * Better coordination	**$25,000.00**	* PAMI Secretariat																							
		Meeting with all (national, regional, international) partners	Organization of meeting with all partners	* Education, Research, and Outreach Planning Meeting	* To help plan and give any needed modifications to PAMI activities	* Better coordination of PAMI activities * Better coordination with partners	**$40,000.00**	* PAMI Secretariat																							
9	**Lab Equipment and IT infrastructure**			Procurement of Laptops	To enhance research and learning via remote access	Dissemination of teaching services to different national and regional partners	**$5,000.00**	* Procurement Office																							
				Procurement of Videoconferencing equipment (5 x $20,000/institution			**$100,000.00**	* Procurement Office																							
				Procurement of e-journals, e-books, Video-conferencing services, repository setup, Research Software, Power Supply	To enhance research and learning at the Center	Increased research output (discoveries, patents, papers)	**$120,000.00**	* Procurement Office																							
				Procurement of Internet infrastructure (NgREN)			**$11,813.00**	* Procurement Office																							
				Procurement of Broadband Access (Annual, NgREN, Phase3, etc)			**$111,287.00**	* Procurement Office																							
				Procurement of XRD equipment	To enhance research at the centre, create internally generated revenue, support research to other centers through equipment use/materials characterization	Increased research output (discoveries, patents, papers), create internally generated revenue, achievement of milestone	**$300,000.00**	* Focused Research Groups, * Procurement Office																							
				Solar Cell fabrication lab upgrade	To enhance research at the centre	Increased research output (discoveries, patents, papers)	**$100,000.00**	* Procurement Office																							
				Biomaterials Lab upgrade			**$93,750.00**	* Procurement Office																							
				Multifunctional lab upgrade			**$93,750.00**	* Procurement Office																							
10	**Accreditation /Benchamarking**		* Carry out GAP assessment of the disciplines/courses * Self assessment of PAMI education and research * Start work on obtaining international accreditation	* To appraise the program	* To have a comparison between PAMI/AUST programs and other world class programs	Accreditation of programs	**$50,000.00**	* AUST																							

11	**Establishment and Maintenance of PAMI secretariat**		* Carry out Legal and accounting services for PAMI	* Legal costs for partnership agreements and any other legal issues * Accounting costs (partial costs for	These are needed in order to provide efficient coordination of PAMI activities	Efficient coordination of PAMI activities	**$17,500.00**	* PAMI Secretariat * Procurement Office																				
			Carry out secretarial administrative functions	Cost of extra Administrative staff(Admin) for PAMI		Efficient coordination of PAMI activities	**$12,500.00**	* PAMI Secretariat * Procurement Office																				
			Procurement of Materials and Supplies	* To obtain materials (consumables) and small equipment that may be needed by the secretariat		Efficient coordination of PAMI activities	**$9,000.00**	* PAMI Secretariat * Procurement Office																				
			Courier Services	* Cost of sending documents to and by partners		Efficient organization of PAMI activities	**$4,500.00**	* PAMI Secretariat																				
			Carry out Media and advertisement activities	* To intimate stakeholders of activities in PAMI and, thereby, facilitate collaboration with new partners and agencies		Efficient organization of PAMI activities	**$9,000.00**	* PAMI Secretariat *AUST Media Office																				
			Local transportation and Workshop/Training	* To facilitate visits to ACE Workshop meetings and training of staff for effectiveness of PAMI		Efficient organization of PAMI activities	**$53,000.00**	* PAMI Center Leaders * PAMI Secretariat																				
		Total					**$3,402,100.00**																					