

P09051 Oxygen Gas Sensor

Weekly Status Report MSD II Week 7

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Team Members		
Samuel Shin Hxs3092@rit.edu	Jeremy Goodman Jvg5404@rit.edu	

Major Milestone Chart *(Milestones from 11 week schedule):*

Task	Expected Date	Responsible Team Member	Modified Completion Date	Comments
Obtain Materials				
commercial photodiode	Complete	JVG		
LED (High Power)	Complete	JVG		
Ru(dpp) Powder	Complete	SHS		
Epiwafers	Complete	JVG		
Circuit Components	Complete	SHS		
N2 & O2 Gas	3-19-09	JVG		
Test Chamber Materials	3-19-09	JVG	4/15/09	Order from M/C or Grainger
OG570 Optical Filter	Complete	JVG	4/3/09	Purchased
LED Pulsing Circuitry				
Design block diagram for basic operation	Complete	SHS		
Simulate System	Complete	SHS	4/10/09	
Build and Test Circuitry	Complete	SHS	4/17/09	
Ru(dpp) Polymer				
Contact Chris Collison	Complete	JVG		contacted
Develop Fabrication Plan (in writing)	Complete	JVG		Mixing procedure found in ieee article
Establish BOM	Complete	All		
Complete polymer fabrication	Complete	All	4/10/09	Finished mixing film, two slides made
Photodiode				
Observe Photodiode Behavior	Complete	All		
Simulate System	Complete	SHS		
Breadboard Testing	Complete	SHS		
Establish BOM	Complete	SHS		
Test System with Optical Filter	3-30-09	SHS, JVG	4/17/09	
Device				
Put Device Together		SHS	4/17/09	

Completed for 04/24/09:

Task	Responsible	Comp Date	Comment
Litho jobs made/tested on gca (PD)	JVG	4/2/09	need to fix some blading issues
final process flow finished (PD)	JVG	3/31/09	2 process flows (short/long)
Photodiode Progress – litho lvl4 contact cuts	JVG	4/8/09	
Fluorescent Film created	JVG	4/7/09	2 slides of film
Purchased optical filter / silver epoxy	JVG	4/7/09	Edmunds optics/mouser
Completed LED hardware and tested	SHS	4/12/09	

To Be Completed for 5/1/09:

Task	Responsible	Comp Date	Comment
Improve Receiver Circuitry in protoboard assembly	SHS	5/1/09	
Update edge	SHS		

Action Items

Item #	Description	Responsible	Due Date	Close Date	Comments
A001	Test out individual components	SHS, JVG	4/15/09		Before sensor is made
A002					
A003					
A004					
A005					

Issues

Item #	Description	Responsible	Open Date	Close Date	Comments
I005	SMFL Photodiode completion date, integration time	JVG/SHS	3/13/09		May take too long to be input into final sensor, might have to use commercial only

Decisions

Item #	Description	Contributing Individuals	Decision Date	Comments
D001				
D002				
D003				
D004				
D005				