# **MTRL 466 MEETING MINUTES**

| **Project Name:** | Process Modelling for Adhesive Bonding of Aluminum Automotive Sheet |
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| **Group:** | 1 |
| **Current Meeting:** | Friday October 4th, 2011 |
| **Minutes Prepared By:** | Adam Ohashi |

**Attendees:**

*Dr. Chad Sinclair*

*GROUP 1: Jerry Chang, Michael Fu, Judy Makmillen, Adam Ohashi*

**Agenda:**

* **Gantt chart / timeline review:**
	+ Gantt chart for last 3 weeks completed/posted to Wiki

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* **Heat transfer model – Next Step:**
	+ Validation of model
		- Heating profile; semi-infinite slab, constant surface temperature
	+ Heat values obtained from curing model integrated
	+ Heating orientation? (1 side vs. both sides)
* **Coupling models:**
	+ Judy managing the combining of all 4 models into one Excel workbook
		- Any issues with lack of sufficient memory?
			* Possibility of creating code to execute calculations
* **Optimization:**
	+ Constraints:
		- Curing: approx. $α\leq 0.95$
		- Softening: approx. $\frac{∆σ\_{5xxx}}{∆σ\_{5xxx}^{o}}\leq 0.9$
		- Hardening: approx. $\frac{∆σ\_{6xxx}^{peak}-∆σ\_{6xxx}}{∆σ\_{6xxx}^{peak}}\leq 0.9$
	+ Waiting on coupled model to produce output values before determining optimal values of T, t, h
		- Smallest time that meets all process constraints
* **Economic Analysis:**
	+ To start this weekend:
		- Determine costs associated with paint baking, energy/operating costs
		- Capital required for an annealing booth, paint station, etc.
			* Can use contacts from local companies for pricing
		- Begin developing a new processing facility (large scale)

**Minutes:**

Meeting start time:

Meeting end time:

**Action Items:**

* **Next meeting:**