**PRINCE SONGKLA UNIVERSITY, HATYAI, THAILAND**

**PROPOSAL FOR VISITING PROFESSOR**

Visiting Professor: Dr.R.Thirumalai / Professor / Dr.N.G.P Institute of Technology, Coimbatore, India

Topic of the Research Topic

Experimental Investigation and Optimisation techniques in Machining and Materials Engineering

***Activity plan***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | Topic | Duration in Minutes | Cumulative Duration in Minutes | Resources to be shared / Used | Outcome |
| 1 | Recent Developments in Machining and Materials Engineering | 40 | 40 | Videos on advancements used in industries | The end user will be aware of recent advancements in industries |
| 2 | Optimization Techniques | 40 | 80 | Lecture materials | The end user will be introduced to several optimization techniques |
| 3 | Procedure for Experimental investigation / Setup for conducting experiments | 40 | 120 | Demonstration video for Experimental setup | The end user can setup an experimental model in their department |
| 4 | Design of Experiments | 40 | 160 | DoE - Materials | The end user will know how to conduct the experiments |
| 5 | Session on Minitab software for analyzing results | 40 | 200 | Minitab version 16 software | The end user will be trained on DoE Minitab software |
| 6 | Case studies - Optimization in Machining and Materials Engineering | 40 | 240 | Journals from Elsevier / Springer | The end user will be taught how several researchers implemented and carried out experiments |